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GROUP DISCUSSION AND THE DISPOSITIONAL
BIAS

by



EDWARD FREDRICK WRIGHT

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND
RESEARCH

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled "Group Discussion Effects on the Dispositional Bias in Attitude Attributions" submitted by Edward F. Wright in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Psychology.

This dissertation is dedicated to Isabel, Gary, and
my parents, Claire and Bill Wright for their
unfailing support.

Abstract

This dissertation assessed the impact of group discussion on the dispositional bias in attitude attributions. The typical attitude attribution paradigm requires subjects to judge the attitudes of a person who wrote an essay under choice or assignment conditions. Because this paradigm was not considered suitable to test the group discussion question, Study 1 was conducted to determine whether the typical paradigm used in this research area contains a demand characteristic that induces subjects to make dispositionally-biased attributions. Specifically, it was hypothesized that the presentation of an essay subsequent to constraint instructions communicates to the subject that the constraints are not totally responsible for the target's behavior, and that the essay must therefore be diagnostic of the dispositions of the actor. This hypothesis was tested by comparing the attitude ascriptions of subjects who received the traditional instructions and questionnaire with those of subjects who received a modified version of the instructions. In the modified procedure subjects were warned that the information they would receive in the experiment may not be relevant to several of the questions they would later be asked. These subjects also received an expanded questionnaire that contained

some items that were unrelated to the essay and/or the essay topic. In this study 192 male and female college students were assigned randomly to one of 8 conditions of a 2(pro vs. con essay) X 2(choice vs. no-choice) X 2(traditional vs. modified procedure) between-subjects factorial design. As predicted, subjects' attitude ascriptions were less dispositionally-biased in the modified procedure condition than in the traditional procedure condition. Subjects in the modified procedure condition, however, still rendered dispositionally-biased attributions. The modified procedure was therefore employed in the second study.

Study 2 examined the influence of group discussion on the dispositional bias. The potential influence on the dispositional bias of extended decision time and the expectation of having a group discussion was also assessed in two additional control conditions. In this study 448 male and female college students were assigned randomly to one of 16 conditions of a 2(pro vs. con essay) X 2(choice vs. no-choice) X 4(control vs. delayed judgment vs. expected discussion judgment vs. group discussion judgment) between-subjects factorial design.

In accordance with predictions, subjects' attitude ascriptions were less dispositionally-biased when they were rendered after a group discussion. Extended

decision time and discussion expectation had no effect on attitude attributions. It was suggested that the effect of group discussion on attitude attributions may result from subjects thinking about arguments that could explain the non-essay-consistent opinions expressed by some group members in the discussion sessions.

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Overview of the problem

One of the major goals of contemporary social psychology has been to delineate the processes by which people perceive and explain the actions of others (see Harvey & Weary, 1981; Jones, Kanouse, Kelley, Nisbett, Valins, & Weiner, 1971). Interest in these processes stems, in part, from the belief that the causes to which we attribute behavior affect both our impressions of the actor and our subsequent behavioral responses to the actor or the situation in which the behavior occurs (Jones & Davis, 1965; Kelley, 1967, 1972). Consequently, a major focus of causal attribution theory and research has been on assessing the conditions under which behavior is judged by observers to be caused by an actor or elicited by the environment (Heider, 1958; Jones & Davis, 1965; Kelley, 1967, 1972).

The attributional formulations of Heider (1958), Jones and Davis (1965), and Kelley (1967, 1972) claim that people follow rational, "common sense" rules of inference in making causal decisions. From this perspective, Jones and Harris (1967) proposed that behavior will not be attributed to an actor if the actor is constrained by circumstances. However, a substantial amount of empirical data indicates that observers infer dispositional qualities from an actor's behavior even when the actor has responded to obvious

situational pressures (see Jones, 1979). Actors who have complied with experimental instructions to behave aggressively (Bierbrauer, 1979), friendly or unfriendly (Napolitan & Goethals, 1979), to take stances in essays (e.g., Jones & Harris, 1967; Snyder & Jones, 1974) or to deliver a speech written by another person (Miller, 1976) have been judged by observers to have dispositions and attitudes consistent with the expressed behavior. This tendency of perceivers to overestimate the causal influence of personal factors relative to dispositional factors has been referred to as the "dispositional bias"¹.

Although there currently is some dispute about the processes underlying the dispositional bias (see Miller & Rorer, 1982), it is generally conceded that the effect is multiply-determined (Jones, 1979). There is also general agreement that the bias arises, in part, from the greater perceptual salience of behavioral information relative to context information (Heider, 1958; Jones, 1979).

An important issue that has received little attention in the literature concerns the extent to which the dispositional bias is likely to occur in naturalistic settings. This question has not been addressed empirically because theorists have simply assumed that the bias influences judgments in such

contexts as "... the courts, the schoolroom, ... the family, ... the special arenas of counseling and diagnosis" (Jones, 1979, p. 108). It would seem, however, that this claim is based on an untested assumption: that causal decisions typically are made under the same judgmental conditions in both the "real world" and the laboratory. Yet there are some potentially important differences between the typical experiment and certain natural settings. For example, attributors in many naturalistic settings are able (or even required) to discuss an actor's behavior with other people before rendering an attribution. Indeed, jury and parole board judgments are rendered after formalized group discussion. Attributors in attribution studies, however, are always asked to render their judgments under conditions of relative isolation. Consequently, there is, at present, no empirical basis for an assumption that attributors will make dispositionally-biased judgments after a discussion of the target person's true feelings concerning the expressed behavior.

The overall goal of this research, therefore, was to assess the impact of group discussion on the dispositional bias. To aid in the interpretation of the results of this investigation, additional control conditions assessed the potential influence of two

related variables on the dispositional bias.

Specifically, attributors who are asked to render their judgments after a group discussion have a longer decision period than attributors who are asked to render their judgments immediately. Thus, the influence on the dispositional bias of extended decision time, independent of group discussion, was examined in this research. There is also evidence that the expectation of having to transmit or receive information may, in itself, create a cognitive state that affects attribution processing (e.g., Harvey, Harkins, & Kagehiro, 1976; Wells, Petty, Harkins, Kagehiro, & Harvey, 1977). Therefore, the influence of the expectation of having a group discussion on the dispositional bias was also examined. Because individuals in "real world" situations often expect to discuss their attributions with others, and they may be free to consider their decision for an extended period of time, the potential influence of discussion expectation and extended decision time on the dispositional bias is also of theoretical interest.

The literature relevant to the present research is reviewed in further sections of this dissertation. In the first section, the literature pertaining to the dispositional bias is reviewed. The influence of group discussion on the judgments of individuals is

considered in the second section. In the third and fourth sections, an attempt is made to specify how group discussion, extended decision time, and the expectation of a group discussion may affect the tendency of attributors to render dispositionally-biased judgments. In the fifth section, a criticism of the traditional experimental paradigm used to investigate the dispositional bias is detailed. In the sixth section, an experiment is reported that assessed whether or not the traditional procedure contains an experimental confound. A modified experimental procedure is also proposed for investigating questions pertaining to the dispositional bias. Finally, a second experiment is reported that tests the effects of group discussion, the expectation of a group discussion, and extended decision time on the dispositional bias.

Review of the Literature

The dispositional bias

Heider (1944) observed that although "changes in the environment are almost always caused by acts of persons in combination with other factors, the tendency exists to ascribe the changes entirely to persons." (p. 361). Heider argued that attributors overemphasize the causal significance of dispositional factors relative to situational factors because an actor and his/her behavior form a natural perceptual unit.

The first empirical evidence for the dispositional bias was obtained in a test of correspondent inference theory (Jones & Davis, 1965). Jones and Harris (1967) tested the hypothesis that a person who behaves in an unexpected or unpopular fashion will be judged to have dispositions consistent with that behavior if she or he was not pressured to engage in the behavior. Subjects in a series of studies were told that their particular experiment involved people's ability to make valid judgments of another's personality on the basis of limited information. In the first study, subjects were asked to judge the true attitude of a target person who had allegedly written an essay either praising or condemning Castro. The experimenter-constructed essay was described as an answer to a political science examination question and a typed statement mentioned that the essay position was either chosen by, or assigned to, the author. The essays were typed, contained a few typing and spelling errors, used a few reasonable and familiar arguments, and were of fair quality. As predicted, the results indicated that attributions of attitudes were more strongly in line with the content of the essay when the essay position was chosen by, rather than assigned to, the author. However, even in the position assignment (no-choice) conditions attributions were strongly in line with the

content of the essay.

Jones and Harris (1967) attempted to increase the salience of the constraint information in a replication and extension of the first study. They reasoned that people readily appreciate the fact that debators often defend positions with which they disagree.

Consequently, subjects in this study were informed that the essay was the first draft of a speech to be used in a debate. The stance of the speech was alledgedly either assigned by the debating team captain or chosen by the target person. To further increase the salience of the constraint information, some subjects were asked to write pro- or anti-Castro essays before reading the standard essay prepared by the experimenter. To assess the impact of essay strength on the bias, some of the subjects in these latter conditions were asked to read ambivalent essays that contained some arguments in support of the opposing view. Despite the measures designed to increase constraint salience, attitude attributions still differed at a statistically significant level in pro-Castro and anti-Castro no-choice conditions. Target persons who had alledgedly written ambivalent essays under choice conditions were judged to hold attitudes only mildly in line with the chosen position. However, target persons who had alledgedly written ambivalent essays under no-choice

conditions were judged to hold attitudes mildly opposed to the assigned position.

To control for the possibility that subjects may have imputed essay-consistent attitudes to the author because the author appeared to be quite familiar with the relevant arguments, instructions in a third study by Jones and Harris stressed that the author had been free to select arguments from an argument pool. In this study, essays favouring and opposing segregation were presented to subjects via an audio tapeplayer. The results of this study replicated the findings of the first two experiments.

Jones, Worchel, Goethals, and Grumet (1971) employed the Jones and Harris (1967) procedure to clarify the effects of behavioral extremity on attitude attributions. Subjects in this study were asked to read either a weak or a strong essay. Strong essays contained four points that were all either in favour of, or against, the legalization of marijuana. The weak essays contained two arguments favouring one side of the issue and two arguments favouring the other side. The concluding statement in the latter essays was a weak endorsement of one side of the issue: In accordance with the Jones et al. predictions, exposure to weak essays moderated attitude attributions under choice conditions and led to attributions opposite to

the essay position under no-choice conditions. It appears, then, that the dispositional bias can be affected by the strength of the target behavior.

A substantial amount of variability in attitude attributions was found in the no-choice conditions of the Jones and Harris (1967) and Jones et al. (1971) studies. Miller (1974) suggested that this variability might reflect individual differences in the amount of freedom the attributors perceived the target person to have in the essay writing task. Miller replicated the Jones and Harris (1967) study and analyzed the attributions of subjects who were categorized as having perceived the target person to be under high or low constraint. As predicted, the attributions of subjects perceiving low freedom were significantly less in line with the essay direction than were the judgments of no-choice condition subjects perceiving higher freedom. The attributions of "low freedom perceivers" in oppose and defend conditions still differed, however, at a statistically significant level.

Snyder and Jones (1974) readdressed the criticism that the experimenter-constructed essays employed in early research on the bias may have contained compelling rhetoric or esoteric information that might have inadvertently impressed observers with the target's expertise - an expertise that might have

provided a "clue" concerning the target person's true attitude (Lopes, 1972). Subjects in a series of studies were instructed to write essays favouring or opposing a social issue. They were then asked to record both their own attitude and their estimate of the typical person's attitude on this issue. The experimenter then interchanged the completed essays and asked subjects to rate the author's true attitude toward the target issue and to re-rate their own attitude on this issue.

These experiments produced several important findings. According to two measures of the dispositional bias: (attributed attitude - writer's true attitude) and (attributed attitude - perceived typical person's attitude), subjects made dispositionally-biased attitude attributions when (a) they, themselves, had previously written an essay and had been provided with a pool of arguments that they could use in their essay, (b) they were made aware that the author of the essay they had read had had access to an argument pool too, and (c) they had or had not changed their attitude toward the essay topic after reading the target's essay. When subjects were told that they had to include certain arguments in their essay, and they knew that the target person wrote his/her essay under similar constraints, the bias was eliminated. Ancillary measures indicated that observer

attributions were not related to observer attitudes toward the target issue in this study. Furthermore, perceived essay persuasiveness was weakly related to observer attributions and not at all related to the target person's true attitude. Snyder and Jones (1974) also asked subjects in an additional study to judge the attitudes of a target person who was known to have merely copied an essay written by another person. No evidence of the dispositional bias was found under these circumstances.

Miller, Mayerson, Pogue, and Whitehouse (1977) assessed the proportion of subjects in an attitude attribution study who based their judgment on the constraint information. Because a manipulation check questionnaire item regarding the target person's degree of choice in the essay writing task could, itself, prompt subjects to mention the constraint, two no-choice conditions were included in the design of this study. In one no-choice condition, a choice manipulation check preceded a request for an explanation of the subjects' attribution. In the other no-choice condition, no manipulation check was included in the post-test questionnaire. The attitude attribution findings replicated those of earlier studies. Analyses of the attribution justifications revealed that 21% of unprompted no-choice condition

subjects mentioned the constraints. Moreover, the attributions of subjects who mentioned the constraints were not dispositionally-biased. It was also found that subjects in the no-choice prompt condition who mentioned the constraint factor rated the target person as having less choice than subjects who did not mention the constraints.

Miller (1976) investigated how perceivers assessed the attitudes of target persons who were seen and heard presenting essays they had either written themselves or had no role in producing. Subjects observed on videotape a target person delivering a speech that he allegedly had written under choice or no-choice conditions. This speech either favoured or opposed amnesty for military service evaders. In two control conditions the target allegedly had no role in producing the essay. In one of these control conditions the target was seen and heard delivering the speech (read condition). In the other control condition the target was heard but not seen (voice only condition). Evidence for the dispositional bias was obtained under all levels of constraint.

Bierbrauer (1979) employed a different experimental paradigm to investigate the effects of time passage on the dispositional bias. In this study, perceivers observed a re-enactment of Milgram's (1963)

experiment of obedience in which a "teacher" obeyed an experimenter's request to deliver dangerously high levels of shock to a "student" confederate. Subjects' predictions of the level of obedience that typical people would display in this context served as measures of sensitivity to situational forces in this study. Dispositional attribution measures were in the form of (1) questions regarding the target person's standing on several traits, and (2) predictions of the target's behavior in several hypothetical situations that could reflect some of the same dispositions as the Milgram situation. When perceivers were requested to spend 30 minutes thinking and writing about the observed event, they viewed it in more situational terms than subjects who immediately rendered attributions. However, this effect was not obtained with the dispositional attribution measures. Furthermore, the attributions of subjects who were distracted from thinking about the event during the 30 minute period did not differ from those made by subjects who were asked to render their judgments immediately. These results suggest that increased thought fosters an appreciation of the role of situational forces in the Milgram paradigm. However, the passage of time, per se, does not appear to influence the dispositional bias.

Napolitan and Goethals (1979) also examined

attributions of constrained behavior that was not in the form of opinion statements: attributions of friendliness based on live interactions. Subjects in this experiment encountered a confederate whose behavior was either friendly or unfriendly. Before the encounter, subjects were told that the confederate had either been instructed to behave in a friendly or hostile manner, or to behave spontaneously. Results indicated that subjects formed impressions of the confederate that reflected the friendliness/unfriendliness of her behavior. This effect occurred regardless of whether the behavior was freely chosen or forced.

Jones, Riggs, and Quattrone (1979) were interested in whether the bias would be enhanced over time because constraint information might possibly decay faster in memory than behavioral information. They also tested whether the bias is an artifact of the information presentation sequence. More specifically, they suggested that since the constraint information is always presented prior to the behavioral information in the research on the dispositional bias, the distortion phenomenon may be due to a recency effect in memory. In a replication of the Jones and Harris (1967) studies, subjects were presented with the constraint information either prior to, or after, they were exposed to the

essay. In addition, subjects returned to the laboratory after one week and recorded their attributions again. Contrary to predictions, results indicated that the tendency for observers to make dispositionally-biased judgments was greater when the constraint information was presented after, rather than before, the essay. The bias, furthermore, was eliminated when subjects rendered their judgments after a one week period. This latter finding, however, was only obtained when the constraint information was presented prior to the essay.

Miller, Baer, and Schonberg (1979) examined the effect on attitude attributions of providing observers with information regarding the actual degree of constraint experienced by the target person in the essay writing task. They also assessed target persons' expectations of the attitudes observers would impute to them after having read the essay and having been informed about either the actual degree of constraint or the choice instructions. When freedom information was not to be given to observers, actors in both choice and no-choice conditions predicted that observers would base their attributions on the essay content. When freedom information was to be given to observers, actors in the choice conditions again predicted that observers would base their attributions on the essay

content. However, actors in the no-choice conditions who expected observers to have freedom information predicted that observers would use this information in forming their attributions. Observers, in fact, based their attribution on the essay when they were not provided with the freedom rating. However, observers used the freedom information when it was provided. The dispositional bias was eliminated when observers were told that the essayist felt little freedom to express his/her true belief. Ancillary measures indicated that perceived essay persuasiveness ratings were equal across all levels of writer-rated freedom and were quite high. Observer attributions were also found to be highly correlated with perceived essay persuasiveness.

Ajzen, Dalto, and Blyth (1979) reasoned that observers in attitude attribution research may form their judgments by searching for evidence consistent with the tentatively held hypothesis that the author holds an attitude consistent with the opinion expressed in the essay. However, an hypothesis provides a cognitive set for the processing of new information. Consequently, ambiguous information that has little bearing on the validity of the hypothesis may be viewed as consistent with the hypothesis. Thus, information such as a description of the target person or the style or organization of the material in the essay may be

viewed as support for the hypothesis that the author holds an attitude consistent with the opinion expressed in the essay. This notion was tested in the following fashion. Subjects read about a target person who wrote an essay favouring or opposing abortion. Subjects in one condition were told whether or not the target had choice in selecting the stance of the essay and were asked to judge the likelihood that the target favours abortion. Subjects in other conditions made their judgments after being given choice information and after reading a description of the target known to be ambiguous with respect to the attribution in question. When no description of the target was provided, subjects made essay-consistent attributions in the choice, but not in the no-choice, conditions. However, when the target description was provided, essay-consistent attributions were made in both the choice and the no-choice conditions. These results are important for two reasons. First, they provide strong support for the Ajzen et al. hypothesis. Second, they suggest that people may not make dispositionally-biased attributions for unembellished reported behavior.

Reeder and Brewer (1979) suggested that the dispositional bias may be explained in terms of the "false consensus bias" (Ross, 1977). According to Ross, people believe that their responses in hypothetical

situations would be typical, appropriate and moderate. Consequently, when a person observes someone else behaving differently than they believe they, themselves, would behave in a given situation, they judge the behavior of the other person to be atypical and, therefore, indicative of a disposition. In terms of the attitude attribution paradigm, subjects are likely to find some novel arguments in the target person's essay and are likely to explain this novelty, i.e., the difference between the target's essay and "their own", in dispositional terms. Hence, targets who write more (less) extreme essays than the reader believes she or he would write under the circumstances would be judged to hold attitudes more (less) in the direction of the essay assignment than the subject himself.

Miller, Jones, and Hinkle (1981) tested the Reeder and Brewer (1977) hypothesis in the following fashion. Subjects were asked to write essays under position assignment. All essays were then rated by independent raters in terms of their extremity in presenting the assigned position. After the essays were interchanged, each subject-target pairing was categorized in terms of the target's essay being more extreme than, similar to, or less extreme than the reader's own essay. Contrary to predictions, the differences between the essay-writers' self-rating on the essay topic and the

attribution made to the target revealed no support for the false consensus bias interpretation of the dispositional bias.

Miller et al. (1981) also tested the notion that the typical attitude attribution paradigm instructions which present the experiment as involving the accuracy of first impressions contain an implicit message or suggestion that the essay is, in fact, diagnostic of the writer's attitude. To assess the influence of this factor on the bias, groups of subjects were provided with one of two cover stories. One cover story was a variant of the traditional instructions. A second cover story stressed that the study was concerned with determining the role that constraining factors play in producing behavior generated under situational pressures. Subjects were then asked to write convincing essays describing themselves as either an extravert or an introvert. The experimenter then interchanged the essays and asked subjects to read the essay and judge the author's true level of extraversion-introversion. Evidence for the bias was obtained with both cover stories. It is questionable, however, whether the concluding line in the constraint salience cover story, "We want you to help us determine the role of constraining instructions in making it difficult to understand what the constrained person is really

like.", achieves the desired goal. Rather, this statement seems to suggest that the constraints are probably not totally responsible for the behavior. Thus, subjects may continue to assume that the essay contains some diagnostic information.

The following is a summary of the major empirical findings on the dispositional bias: 1) the bias has been found with target behaviors ranging from opinion statements (e.g., Jones & Harris, 1967) to expressions of aggression (Bierbrauer, 1979) and friendliness (Napolitan & Goethals, 1979); 2) the occurrence of the bias is not dependent on low levels of constraint salience (e.g., Snyder & Jones, 1974; Miller, 1976; Jones, Riggs, and Quattrone, 1979); 3) a minority of observers tend not to make dispositionally-biased attributions even when constraint salience is at a minimal level (e.g., Jones & Harris, 1967; Miller et al., 1977); 4) the bias is eliminated when a) the constraint information is made highly salient by informing subjects that the target person merely copied an essay written by someone else (Miller, 1976), b) the constrained information is reported rather than observed (Ajzen et al., 1979), and c) observers are informed of the target person's own estimate of his/her degree of constraint (Miller et al., 1979); 5) essay persuasiveness is not correlated with essay writer's

actual attitude on the target issue (e.g., Snyder & Jones, 1974); 6) perceived essay persuasiveness has been found to be correlated with imputed attitudes in some studies (e.g., Snyder & Jones, 1974; Miller et al., 1979).

In the past few years, several arguments have been advanced to explain the dispositional bias. Jones (1979) recently reviewed the literature on the bias and made the following observations. First, he concluded that the bias is a multiply-determined phenomenon. Second, he endorsed Heider's suggestion that the bias stems, in part, from the fact that an actor and his/her behavior form a natural perceptual or cognitive unit. Jones argued that this factor plays a particularly important role in the occurrence of the bias when the actor is seen or heard emitting his or her behavior. Third, he proposed that early in the decision process observers tentatively accept the hypothesis that the actor's behavior reflects a correspondent disposition. However, he proposed that when the observer modifies this judgment to take account of the constraint information he makes an insufficient adjustment (Tversky & Kahneman, 1974). The result of these two factors is a residual bias effect. Finally, Jones suggested that the bias may not occur if contextual factors set the observer to consider as his/her task

the determination of the impact of situational pressures on behavior.

In a recent discussion, Miller, Baer, and Schonberg (1979) argued that if subjects in attitude attribution experiments are to use constraint information in a theoretically proper way, i.e., to discount the behavior under no-choice conditions, they must understand explicitly the probabilistic and statistical implications of the essay position being randomly assigned to the writer. However, as Wells and Harvey (1977) have noted, many people lack an intuitive grasp of the meaning of random assignment. Hence, Miller et al. suggested that the dispositional bias may be an inevitable occurrence in attitude attribution studies unless subjects receive some guidance with respect to the meaning of random assignment.

Miller, Norman, and Wright (1978) provided evidence that perceivers exaggerate the dispositional significance of an individual's behavior when they are engaged, or expect to be engaged, in an interaction with this person. Data from control conditions in this experiment supported the argument that attributors biased their judgments of the target person in order to promote a sense of control over their environment. More specifically, it was suggested that the attributional distortion was based on the perceivers' need to feel

that the target person was an understandable, predictable entity.

Miller and Rorer (1982) recently offered a new perspective on the determinants of the bias. They suggested that people hold implicit theories or expectations regarding the relationship between a writer's attitude and the position or quality of the essay that is produced under assigned-position instructions. Specifically, they suggested that subjects believe that writers will produce a strong or persuasive essay if, and only if, they personally endorse the position. If writers do not endorse the position assigned to them they will produce relatively weak essays. Thus, if subjects are given a strong essay they are likely to infer that the writer was assigned a position that was consistent with his or her real attitude. If given a weak or ambivalent essay, however, subjects will infer that the real attitude of the writer is only minimally related or even opposed to the essay position. Miller et al. added that subjects' expectations regarding the relationship between the quality of an author's essay and his true attitude toward the essay position is, in fact, illusory (Snyder & Jones, 1974; Miller et al., 1979). Nevertheless, since subjects under position assignment are, in fact, able to write generally convincing essays (Miller,

Baer, and Schonberg, 1979; Miller, Jones, and Hinkle, 1981), they are judged by observers to hold attitudes consistent with the essay position.

The following findings support this reasoning. Miller (1974) found that weak essays written under constraint conditions were considerably less correspondent than strong essays written under position assignment. Schneider and Miller (1975) found a significant reduction in the dispositional bias effect when bad arguments were included in essays written under position assignment. Jones et al. (1971) also found that weak arguments written under assign conditions led to contra-correspondent attributions.

Miller and Rorer (1982) assessed subjects' expectations of the position and persuasiveness of essays (pro and con) that would be written under choice and assign conditions. They also examined subjects' expectations of the amount of difficulty a writer would experience in carrying out this task. As predicted, subjects expected essays written under constraint to be less extreme, lower in quality, and harder to write than essays written under choice conditions. Furthermore, the more pro the writer's attitude actually was, the more pro the essay was expected to be. Subjects also expected that under assign conditions, authors with actual pro (con) attitudes

would write higher quality pro (con) essays with less difficulty than would authors who actually held con (pro) attitudes.

There appears, then, to be some support for Miller and Rorer's argument that the dispositional bias is based on the perceiver's inclination to adopt a diagnostic judgmental set in the attitude attribution paradigm. However, Miller and Rorer also noted that their conceptualization of the bias is not incompatible with Jones' (1979) interpretation. They suggested that, "One could view essay strength as the parameter which cues the perceiver as to the proper adjustment to make, once the initial hypothesis of correspondence between target's belief and the essay position assignment has been made. The subject may infer that virtually no adjustment has to be made if the essay is powerful, whereas a considerable adjustment (or rethinking about the context of the essay) would be in order if the essay is equivocal." (p. 57). It is important to recall, though, that subjects fail to appreciate that people can produce extreme behavior under constraint conditions without actually endorsing this behavior (Snyder & Jones, 1974). Consequently, the essay strength parameter which Miller and Rorer suggest might serve as a cue for subjects as to the proper adjustment to make to the hypothesis is erroneously derived.

Discussion effects and individual judgments

One of the critical issues in generalizing the dispositional bias phenomenon to real world settings concerns the possible influence of group discussion. As noted earlier, perceivers in naturalistic contexts may be able to influence each others' judgments through the exchange of attributional information. Indeed, in many naturalistic settings (e.g., jury or parole board contexts) people are required to pool their knowledge and opinions before rendering a judgment.

Research concerning the influence of group discussion on judgments has focused primarily on situations in which members of a group are explicitly instructed to reach a consensual decision. Early work in this area sought to determine whether the "convergence phenomenon", i.e., the tendency for judgments made by individuals in the presence of others to be less extreme than judgments made by isolated individuals (Allport, 1924; Sherif, 1935) would occur if group members were induced to reach a consensual decision through discussion. Kogan and Wallach (1966), for example, found that post-discussion group judgments represented the average of the judgments that had been previously made by the individuals who comprised the group.

However, Kogan and Wallach's (1966) finding contrasted sharply with other findings (e.g., Stoner, 1961; Wallach & Kogan, 1965) which indicated that groups that discuss problems concerning the possible loss of money, prestige, or self-satisfaction tend to prefer a "riskier" alternative than one which would have resulted from compromise between the choices of the individuals comprising these groups. The research paradigm employed by Wallach and Kogan (1965) and others requires subjects to read descriptions of hypothetical situations in which a person is confronted with a choice between a certain and an uncertain course of action. One alternative, if chosen, guarantees a safe, but mediocre, outcome. The other alternative involves risk. Subjects must choose the minimum probability of success that they would accept in order to recommend the uncertain alternative.

The research that purportedly demonstrated a preference for risky decisions by groups has come under criticism. Specifically, many studies that used the Wallach and Kogan paradigm (e.g., Brown, 1965; Pruitt & Teger, 1967) revealed that groups shift toward caution on some questionnaire items. These findings led to the conclusion that discussion may induce group members to strengthen their support for the reasonable rather than the risky position (Brown, 1965). Moreover, evidence

that judgmental shifts also occur with attitudinal issues (Doise, 1969; Gough & Fraser, 1972; Moscovici & Zavalloni, 1969; Myers & Bishop, 1970, 1971). has led to the more general conclusion that group discussion promotes judgment polarization. That is, following group discussion, group members come to hold their initial views more strongly than was at first the case (Doise, 1969; Moscovici & Zavalloni, 1969).

Several arguments have been advanced to explain the group polarization effect. One popular explanation, the "social comparison" explanation, is based on the notion that people are motivated to maintain a positive self-image. According to this view, subjects want to believe that their views regarding positive values are at least as extreme as those held by others. However, through group discussion many subjects learn that other group members embrace these values more strongly than they, themselves, do. Consequently, many subjects strengthen their support for the initially favoured position.

Another compelling explanation for the polarization effect, the "persuasive arguments" explanation, emphasizes that group judgments, like group problem solving decisions, are influenced by the exchange of persuasive arguments. According to this view, group polarization occurs for two reasons: first,

most of the arguments that are expressed in the discussion support the initially held view. Second, for most issues there is a culturally-based pool of arguments in support of different judgments or courses of action. Since some persuasive arguments are often known to only some subjects, i.e., are partially-shared, some group members will shift their opinions when they are exposed to these new and compelling arguments.

In an important test of these two competing explanations, Burnstein, Vinokur, and Trope (1973) found that group shifts occurred as a consequence of the mere exchange of positions only when subjects were given time to think about arguments that would support these alternative positions. This finding has generally been viewed as compelling support for the persuasive arguments explanation of the polarization effect.

The persuasive arguments hypothesis suggests that if a very persuasive argument were known only to a minority of group members, the transmission of this argument could lead to a shift in the judgments of the other group members. Empirical support for this notion has been obtained in group problem solving contexts where the merit of suggestions can be determined by means of objective criteria. For example, research by Thorndike (1938) in which group members were instructed

to render a consensual judgment on various intellectual tasks revealed a strong judgmental shift toward a correct response if even a single group member made a case for this response. However, the shift in this direction was only complete under circumstances in which the verifiability of the correctness of the response was extremely high, i.e., with insight or "eureka" solution problems. Thorndike's findings have been supported in a recent series of studies by Laughlin and his associates (Laughlin, Kerr, Davis, Halff, & Marciniak, 1975; Laughlin, Kerr, Munch, & Haggarty, 1976). More importantly, however, Thomas and Finke (1961) replicated these findings in a group problem solving study in which no unanimity pressures were imposed on the group members. Subjects were simply instructed to complete a report outlining the individual members' post-discussion responses on several target tasks. In this research, the response of a single group member was able to shift the judgments of other group members even under circumstances in which the verifiability of the correctness of the response was not high.

In summary, then, discussion may induce group members to alter their judgments. This effect seems to be due, primarily, to the transmission of persuasive arguments during the discussion. Judgmental shifts are

likely to be large if the expressed arguments are persuasive and partially-shared.

Group discussion and the dispositional bias

The foregoing analysis suggests that the dispositional bias might be altered by group discussion. This conclusion is based on the notion that persuasive arguments that could promote rational processing of attributional information may be appreciated by only some perceivers. Consequently, perceivers who are exposed to these partially-shared arguments in group discussion may be induced to make less dispositionally-biased attributions.

More specifically, it seems likely that some subset of the following three arguments would be expressed in a group discussion of the essayist's opinion under no-choice conditions of an attitude attribution experiment: 1) that the essayist must hold an essay position-consistent attitude (unless the essay is exceptionally weak) because only an advocate of the expressed opinion would (or could) write a convincing essay under constraint conditions (Miller & Rorer, 1982); 2) that people can, and often do, produce relatively convincing behavior under constraint conditions without actually holding an opinion consistent with the expressed behavior; and 3) that the typical person's attitude on the target issue is the

best estimate of the target's opinion in this instance because the essayist was assigned the position and the assignment renders the behavior non-diagnostic. The inclusion of the latter two arguments in the list is based on Miller et al.'s (1977) finding that some subjects in attitude attribution experiments appreciate the significance of the constraint information and do not make biased attributions. These latter two arguments are simply different logical expressions of the notion that the expressed behavior can be completely accounted for in terms of the constraints.

It is reasonable to assume that attributors who have not previously considered the latter two arguments will either cease to view the essay as diagnostic of the author's true attitude or will decide that the constraint information deserves more weight in their decision process when these points are expressed in the discussion. It was therefore hypothesized that a group discussion of the essayist's true opinion on the target issue would decrease the tendency of subjects to render dispositionally-biased attributions.

Extended decision time, discussion expectation,
and the dispositional bias

As noted earlier, judgments that are rendered by individuals immediately after exposure to the target behavior differ from judgments that are made after a

group discussion in respects other than the opportunity for argument-sharing. In the latter case, attributors are provided with a longer deliberation period than subjects in attitude attribution research are typically allowed. It may also be the case that the expectation of having a group discussion produces a cognitive state that affects the manner in which information is processed (e.g., Zajonc, 1960).

The empirical findings concerning the influence of extended decision time on the dispositional bias are unclear. Bierbrauer (1979) found that increased thought, but not time passage, per se, enhanced the tendency of attributors to explain constrained behavior in situational terms. However, increased thought had no effect on subjects' tendency to attribute dispositions to the target person. Jones et al. (1979) found that the dispositional bias was attenuated when subjects re-rated their attributions after a one-week delay. However, this effect occurred only when the constraint information had originally been presented prior to, rather than after, the essay. Therefore, no predictions can be confidently offered concerning the impact of extended decision time on the dispositional bias.

The suggestion that the mere expectation of discussing one's views may affect subjects' tendency to render dispositionally-biased attributions stems from

Zajonc's (1960) work on cognitive tuning sets. Zajonc (1960) originally proposed that individuals who are set to transmit information have a relatively fixed and polarized cognitive structure which fosters the exclusion of contradictory information. Individuals who are set to receive information, on the other hand, were considered to have a more open and flexible cognitive structure. Zajonc suggested that polarization occurs under transmission tuning because of a need to communicate a clear, unambiguous impression.

Harvey et al. (1976) recently proposed that non-anticipated or unexpected occurrences such as unusually extreme events might stimulate expectant transmitters to develop a particularly definitive interpretation of the event. Consistent with this hypothesis, these researchers found that expectant transmitters ascribed higher levels of causality to plausible factors than did expectant receivers when an observed event was extreme. In addition, Wells et al. (1977) demonstrated that observers who anticipated discussing their interpretation of an actor's behavior shifted their attributions in the direction of those generated by the actors themselves.

These findings indicate that cognitive tuning sets can influence attribution processing under certain conditions. However, there currently is no compelling

theoretical framework to guide hypotheses concerning the precise role of tuning sets in the attribution process. Consequently, no hypotheses were proposed regarding the possible influence of the cognitive state engendered by the expectation of having a group discussion on the dispositional bias.

A critique of the attitude attribution paradigm

In a recent review of the literature on the dispositional bias, Jones (1979) re-emphasized that the attitude attribution paradigm employed by Jones and Harris (1967) is suitable for investigating the origins and generality of the dispositional bias. Kahneman and Tversky (1982), however, recently questioned the suitability of "question-answering" paradigms for the study of human judgmental processes. Of major concern to these theorists is the principle of cooperativeness in conversation (Grice, 1975) which specifies that listeners in conversation (information receivers) are entitled to assume that speakers (information providers) are trying to be informative, truthful, relevant, and clear. One implication of this principle is that subjects (information receivers) are likely to assume that any information package that is presented to them by the experimenter has task relevance. This fact makes it difficult for researchers to investigate the important issue of whether people employ irrelevant

information in judgmental tasks within this paradigm. The implicit message to view experimenter-provided irrelevant information as relevant is an instance of what Orne (1959) has referred to as a demand characteristic. Orne defined a demand characteristic as any cue which communicates to the subject what the experimenter hopes to find, including "the scuttlebutt about the experiment, its setting, implicit and explicit instructions, the person of the experimenter, subtle cues provided by him, and, of particular importance, the experimental procedure itself" (Rosenthal & Rosnow, 1969, p. 146).

With respect to the attitude attribution paradigm, the direction and content of the essay are irrelevant to solving correctly the attribution task because the external constraints are sufficient to account for the essayist's behavior. The experimenter nevertheless provides the subject with the essay (as part of the cover story) and thus violates the rule of cooperativeness in conversation. It is therefore possible that the responses obtained in attitude attribution experiments are due, in part, to subjects' assumptions that a) the experimenter considers that the constraint information is not totally responsible for the essayist's behavior, and consequently b) the experimenter considers the essay to have some

diagnostic significance (otherwise, why were they given the essay at all?).

Pilot research has been conducted on this question and the findings lend support to the position that the generic attitude-attribution paradigm contains an experimental demand. Groups of five subjects in a typical attitude attribution study were asked to discuss the attribution question before rendering individual judgments. In some groups, an experimental confederate was instructed to mention the matter of the constraints. Audiotapes of the discussions revealed that when the constraint information was raised for discussion, a group member or members would often argue that this information was not supposed to be given much weight because their job was to scour the essay for hints of personality, the constraint information notwithstanding.

If the influence of group discussion on the dispositional bias is to be understood and generalized to other settings, this question should be tested within a paradigm that does not capitalize arbitrarily on demand characteristics. This is not to suggest that credible sources in the "real world" never express irrelevant statements to attempt to dupe attributors into viewing an event in dispositional terms. However, in at least some instances in which this is likely to

occur, perceivers are primed to question the relevance of any attributional information that they receive. For example, defense attorneys often provide jury members with "red herrings" to dilute more diagnostic information or to distract them from using diagnostic information (Nisbett, Zukier, & Lemley, 1981). However, jury members know that this behavior is consistent with the attorney's role in the adversary system and they appreciate the fact that they may be presented with a good deal of irrelevant information. Furthermore, attributors in naturalistic settings often experience no extraneous pressures to make dispositionally-biased attributions. In view of these considerations it seems appropriate and important to investigate the influence of group discussion on the dispositional bias under conditions in which subjects are free from extraneous pressures to render biased judgments.

A second goal of this research, then, was to test the hypothesis that subjects in attitude attribution studies base their responses, in part, on an assumption that the experimenter does not consider the constraint information to be totally responsible for the essayist's behavior and that the essay, therefore, must be diagnostic of the dispositions of the author. This hypothesis was investigated by the first experiment in this dissertation. Subjects were told that the study

involved reading information and answering questions. Subjects in half the experimental conditions received instructions similar to those that are typically used in attitude attribution studies. They were then asked to read an essay that advocated or opposed a particular position on an issue, knowing that the essay position was either chosen by (choice conditions), or assigned to (no-choice conditions), the author. They were then provided with a questionnaire containing items that pertained to the essay topic. One of these questions asked subjects to estimate the author's attitude toward the target issue.

To counter the suggestion inherent in the attitude attribution procedure that the essay has some degree of relevance to the dependent measure questionnaire item, this procedure was modified in the following fashion. First, subjects received an explicit warning that the target information may not be relevant to every question that is asked in the experiment. Second, the experimental questionnaire was modified to include items that did not pertain to the target issue. More specifically, the other half of the subjects were explicitly told that the target information (the essay) might not be directly germane to any specific question posed by the experimenter. They were told that the nature of the information that subjects were receiving

in this study was being varied within the experiment. They were also told that each subject would be asked to complete a questionnaire containing a set of questions that had been selected randomly from a larger pool of items. In addition, they were cautioned that as a consequence of this method of information and question selection, many of the questions they might be asked might seem poorly matched to the information they have received. All the subjects in these conditions, in fact, were asked to read an essay advocating or opposing a particular stance. They were also told that the essay position was either chosen by or assigned to the author.

The questionnaire that these subjects were given contained several items. Some of the items were related to the essay but not the essay topic, i.e., "Do you think that the target person is a generally well organized person?". Consistent with the cover story, other items had no relevance to the essay at all. One question asked subjects to rate how persuasive they perceived the essay to be. This item was included in the questionnaire to assess the extent to which subjects base their attributions on the perceived quality of the essay. A question asking subjects to estimate the target's true attitude toward the target issue was imbedded within this series of questions.

These procedural modifications were designed to eliminate any procedure-generated pressures that subjects in attitude attribution experiments may experience to minimize the importance of the constraint information. If such pressures are, in fact, generated by the traditional paradigm then subjects in the no-choice conditions should be less likely to make dispositionally-biased attributions when run under the modified, as opposed to the traditional, procedure. Since the modifications were intended to alter only the interpretation of the constraint information, subjects in the choice conditions should make comparable attributions in the two procedure conditions.

It is important to acknowledge that the procedural modifications represent a "compound" manipulation. That is, there are several small differences between the traditional paradigm and modified paradigm conditions. It is conceivable that the modified procedure may thereby influence subjects' attributions in unintended respects. For example, these changes may induce subjects to adopt a conservative question-answering strategy, i.e., they may make mid-scale responses to all the questionnaire items. It would be inconsistent with the current conceptualizations of the dispositional bias, however, to propose that such

influences would affect subjects' attributions in the no-choice conditions, but not in the choice conditions.

It was therefore predicted that the attributions made by subjects who were run under the modified procedure would be less dispositionally-biased than those made by subjects who were run under the traditional procedure. More specifically, a three-way interaction of the following form was predicted: in the no-choice conditions, the difference between subjects' responses in pro essay and con essay conditions would be greater in the traditional procedure condition than in the modified procedure condition. These differences were not expected to obtain in the choice conditions.

Experiment 1

Method

Subjects and design. One hundred and ninety-two introductory psychology students were assigned randomly to conditions in a 2(pro vs. con essay) X 2(choice vs. no choice) X 2(traditional procedure vs. modified procedure) between-subjects factorial design.

Stimulus materials. To insure that the target essays would not be stronger than the constraining conditions subsequently described to no-choice condition subjects would have actually produced, the study employed essays that were actually generated by a

separate sample of subjects. Thirty-two subjects were told to write an essay favouring the notion that "the four western provinces should separate from Canada", or told to write an essay opposing this position. They were also asked to include in their essay arguments on (a) the need for provincial autonomy, (b) the economic arguments, and (c) any other arguments they could think of favouring/opposing western separatism. Assignment of subjects to essay-writing conditions was random and all participants received experimental credit. After the essays were written, the essay writers completed a questionnaire that included the item "The western provinces should separate from Canada", 1(disagree strongly) to 9(agree strongly) (see Appendix A). These measures were included to determine whether the essay writers' attitudes corresponded to the position they advocated in their essays (e.g., via chance in random assignment or as a consequence of a self-persuasion process). Subjects' attitudes toward separatism in pro-essay ($M = 2.4$) and con-essay ($M = 1.6$) conditions did not differ significantly $t(30) = 1.52$ n.s. Because unpersuasive essays have been found to elicit attributions only mildly in the direction of the essay position, or even opposed to the essay position (Jones & Harris, 1967; Jones et al., 1971), it was important that the pro and con essays selected for this research be equally, and at least moderately, persuasive.

Consequently, four pro-separatism and four con-separatism essays that were of reasonable length, persuasiveness, and legibility were chosen from this sample and rated by a separate sample of 20 subjects in terms of persuasiveness. Each subject in this sample was asked to read four randomly selected essays. They were then asked to evaluate each essay on a 9-pt. scale with endpoints, 1 = This essay is not very persuasive at all, 9 = This essay is very persuasive (see Appendix B). The 2 pro-separatism and 2 con-separatism essays that were judged to be of moderate persuasiveness (mean ratings = 4.9, 5.4, 4.5, 4.8) were selected as stimulus materials. The attitude attributions of the writers of the four chosen essays regarding western separatism were identical (attitude attribution = 1).

Procedure. Subjects were run in groups of four to seven. They were seated at separate tables and told that the experiment involved reading pieces of information and responding to questions. Each subject was then given a folder containing several sheets of paper arranged in the following sequence: two instruction sheets, an essay, a questionnaire, and an envelope. They were told to open the folder and read the enclosed sheets very carefully and in order. The first instruction sheet discussed the general goal of the study and outlined the experimental instructions.

The experiment was introduced therein as an investigation of the perception and interpretation of social events. It was further mentioned that there were two parts to the study. In the first part, participants were being asked to read pieces of information. In the second part, participants were being asked to respond to some questions. From this point onward the text of the initial instruction sheet differed in the traditional and the modified procedure conditions. In the traditional procedure conditions it was mentioned that the information being used in the present experiment was in the form of essays written by undergraduate students. It was then stated that subjects should carefully read the message on the following page and then read the essay. They should then complete the questionnaire and seal it in the envelope to preserve the confidentiality of their responses (See Appendix C). In the modified procedure conditions the instructions stated that the type of information provided to participants was being varied within this study. It was further stated that:

"each participant in this study is being asked to respond to a set of questionnaire items that have been randomly selected from a larger pool of questions. Consequently, many of the questions you may be asked might seem

poorly matched to the information you have received. That is, you may be asked to make judgements for which the information you were given is either irrelevant or insufficient for making that judgment. You should, therefore, not assume that the information you have received is directly relevant to each specific question you are asked. Nevertheless we would like you to make your best attempt at answering all the questions provided."

The message then asked participants to re-read the instructions and then carefully to read the message on the following page. They were then told to read the additional information, complete the questionnaire, and seal the completed questionnaire in the envelope to preserve the confidentiality of their responses (See Appendix D). The message on the second instruction sheet stated:

"On the following pages you will find an essay written by an introductory psychology student who participated in a psychology experiment last year. The goal of that particular study was to collect arguments on both sides of the issue of western separatism. To

facilitate this goal, participants were asked to write short essays (3 or 4 paragraphs in length) either favouring or opposing western separatism."

In the choice conditions the message stated, "All participants were allowed to choose for themselves whether their essay would take a pro-western separatism or an anti-western separatism stance." In the no-choice conditions the message stated, "However, the participants were not allowed to choose for themselves whether their essay would take a pro-western separatism or an anti-western separatism stance. Rather, participants were assigned by the experimenter, at random, to write either a pro or an anti essay, regardless of their own true beliefs on the issue." In both the choice and no-choice conditions the message continued with the statement, "All participants were given ten minutes to compose their essay". The message concluded with a reminder to re-read this message, to turn to the essay on the subsequent pages, and then to complete the questionnaire. The message was written in capital letters and the passages describing the choice information were underlined (See Appendices E and F). The experimenter ensured that these instructions were followed. In the traditional procedure conditions, subjects were asked to complete a two-page questionnaire comprised of four questions. The first

question, which represented the dependent variable, stated, "The true opinion of the person who wrote this essay is that the western provinces should separate from Canada", 1 (Author does not believe this at all) to 9 (Author strongly believes this). The second questionnaire item also concerned western separatism. The third question asked, "How persuasive would you say this essay is?", 1 (Not very persuasive at all) to 9 (Very persuasive). A fourth question, located on page two of the questionnaire, asked subjects to report whether or not the author was free to choose the stance of the essay (See Appendix G). Subjects in the modified procedure conditions were asked to complete a two-page questionnaire containing eight questions. The following message was hand-printed at the head of the first page of the questionnaire: "Please consider each question carefully. Recall the instructions.". The item which constituted the dependent measure was placed fifth in the question sequence. The questions that appeared third and fourth on the questionnaires employed in the traditional procedure conditions were placed seventh and eighth on page two of the modified procedure condition questionnaire (See Appendix H). On both questionnaires a message indicated that participants should seal the completed questionnaire in the envelope to ensure the confidentiality of their responses. When all subjects had completed the questionnaire they were

fully debriefed.

Results and discussion

Attribution of Attitudes. A 2 X 2 X 2 analysis of variance conducted on the attitude attribution measures revealed a significant main effect for essay direction $F(1,184) = 339.584$, $p < .001$. This effect was qualified, however, by a significant Choice X Essay Direction interaction $F(1,184) = 56.508$, $p < .001$, and a significant Procedure X Choice X Essay Direction interaction $F(1,184) = 10.379$, $p < .002$. Furthermore, the Essay Direction X Procedure interaction within the no-choice conditions was also significant $F(1,184) = 7.47$, $p < .01$, while the Essay Direction X Procedure interaction within the choice conditions failed to reach statistical significance $F(1,184) = 3.36$, n.s. (see Appendix I). As shown in Table 1, this pattern of results indicates that under no-choice conditions only, the difference between the attribution responses of subjects in the pro essay and con essay conditions is smaller when subjects were exposed to the modified, rather than the traditional procedure. This finding provides support for the hypothesis that subjects' attribution responses are influenced by an assumption that the experimenter believes the essay is diagnostic of the dispositions of the author. However, inspection of the means in Table 1 reveals that in the no-choice

Table 1

Mean Attributions of Attitudes Toward
Western Separatism

		Traditional Procedure	Modified Procedure
No-Choice	Pro Essay	6.3 _d	5.8 _d
	Con Essay	2.7 _b	4.1 _c
Choice	Pro Essay	7.6 _e	8.1 _e
	Con Essay	1.9 _{ab}	1.2 _a

Note: The greater the mean, the more favourable the attributed attitude toward western separatism on the 9-point scale. Means not sharing a common subscript differ at $p < .05$ using the Newman-Keuls procedure.

Table 2

Correlations Between Subjects' Attitude
Attributions and Essay Persuasiveness Ratings

		Procedure	
		Traditional	Modified
No-Choice	Pro Essay	-0.44 [*]	0.52 ^{**}
	Con Essay	-0.05	0.02
Choice	Pro Essay	0.26	-0.02
	Con Essay	0.02	-0.28

* $\underline{p} < .05$

** $\underline{p} < .01$

modified procedure condition, the responses of pro essay condition subjects were significantly larger than the responses of con essay condition subjects. This suggests that the dispositional bias effect, as demonstrated in attitude attribution experiments, is attributable only in part to the violations of the principle of co-operativeness in conversation that are ingrained in the attitude attribution paradigm. Nevertheless, the results of this experiment indicate that hypotheses regarding the origins and generality of the dispositional bias should be investigated with the modified procedure employed in this experiment.

Ancillary Measures. Consistent with the pre-test ratings, subjects judged the essays to be moderately persuasive ($M = 4.2$, overall). Subjects' attitude attribution responses were correlated with their rating of the persuasiveness of the essay they had read. A positive relationship between attribution response and perceived essay persuasiveness would be demonstrated by a significant positive correlation in pro essay conditions and a significant negative correlation in con essay conditions. A Pearson product-moment test was used to compute separate correlations for each of the eight experimental conditions (see Table 2). Inspection of these correlations reveals that in only two experimental conditions were the persuasiveness ratings

related to the attribution responses: the no-choice/pro essay/traditional procedure condition and the no-choice/pro essay/modified procedure condition. However, in only the latter condition was this correlation both statistically significant and in a positive direction. On the basis of this evidence, then, subjects in this experiment do not appear to have based their attributions on perceived essay persuasiveness.

An analysis of the responses to the question regarding whether or not the author of the essay was free to select the stance of the essay revealed that 20 of the 192 subjects answered this question incorrectly. Ten incorrect responses were recorded by subjects in each of the two procedure conditions.

Experiment 2

Introduction and overview

The primary goal of this experiment was to test the hypothesis that group discussion of the essayist's true opinion on the target issue attenuates the dispositional bias. As previously discussed, this hypothesis was based on the assumption that perceivers who appreciate the implications of the constraint information for the attribution task, might lead other perceivers to reach a similar understanding through group discussion. The potential influence of extended decision time and the expectation of having a group

discussion, per se, on the dispositional bias was also examined in this experiment.

In view of the findings of Experiment 1, subjects in the current experiment were provided with an information package similar to that which was used in the modified procedure conditions of study one. However, after subjects had read the essay they were instructed to either: 1) respond to the questionnaire immediately, 2) respond to the items after 10 minutes of thought on these questions, 3) spend 10 minutes preparing for a group discussion of these questions with some of the other subjects in the session or 4) engage in a 10 minute group discussion about these questions with some of the other subjects in that experimental session. The questionnaire was comprised of the first six items of the questionnaire that was used in the modified procedure conditions of Experiment 1. Upon completion of this questionnaire, subjects in all conditions were asked to respond to a second questionnaire. The items on the second questionnaire asked subjects to rate the persuasiveness of the essay they had read and to judge whether the target person was or was not free to select the essay stance. To gain some insight into the processes by which subjects form attributions in these four judgmental contexts, a third questionnaire item asked subjects to explain, in

detail, how they arrived at their attributions regarding the target's opinion on the target issue.

It is important to note, however, that an experimenter-requested attribution justification is unlikely to provide an exact representation of a subject's cognitive processes on a particular task. One shortcoming of this procedure is that subjects may misrepresent their decision-making strategies due to motivational concerns. For example, a subject may not want to admit that he or she had failed initially to appreciate the significance of the constraint information. Other subjects might be reluctant to admit that they made their decision in a totally disinterested fashion. Thus, they may report falsely that they employed a sophisticated strategy to reach their decision. A second problem with this process-tracing technique is that subjects may be unable to report accurately the cognitive processes affecting their judgment (Nisbett & Wilson, 1977). Specifically, if subjects have not been instructed explicitly to ponder the attribution question they may employ judgmental heuristics to reach their decision. Moreover, when they are subsequently asked to explain the basis of their attribution they may infer that their decision resulted from a comparatively sophisticated analysis of the relevant information. It

was therefore decided that a second process-tracing would be useful in the present research.

Ericsson and Simon (1980) recently discussed the relative merits of concurrent and retrospective verbalization techniques for tracing cognitive processes. In the former instance, subjects are asked to report on their cognitive processes while they are engaged in a task. In the latter instance, subjects are asked about cognitive processes that occurred at an earlier point in time. Because the time of the report is later with the retrospective than the concurrent verbalization procedure, these authors suggested that concurrent verbalizations may provide a superior representation of subjects' cognitive processes. Since the group discussions in the present study are concurrent verbalizations of the attitude attribution task, the discussions may provide valuable insights regarding both 1) the manner in which interacting attributors influence each other's judgments, and 2) the process by which isolated attributors make dispositionally-biased attributions. For these reasons the group discussions in the present experiment were unobtrusively transcribed by the experimenter.

In summary, it was predicted that the attributions made by subjects who had engaged in a group discussion would be less dispositionally-biased than those made by

subjects who rendered their judgments immediately after reading the essay. No predictions were offered regarding the impact of extended decision time and discussion expectation on the dispositional bias. Thus, a two-way interaction of the following form was predicted in the no-choice conditions: the difference between subjects' responses in pro essay and con essay conditions would be greater in the control condition than in the group discussion condition. These differences were not expected to obtain in the choice conditions.

Method

Subjects and design. Four hundred and forty-eight introductory psychology students were assigned randomly to conditions in a 2(pro vs. con essay) X 4(control vs. expected group discussion judgment vs. delayed judgment vs. group discussion judgment) X 2(choice vs. no-choice) between-subjects factorial design. Fourteen individuals participated in each of the twelve non-group discussion conditions and twelve groups, comprised of 5 subjects each, participated in each of the 4 group discussion conditions.

Stimulus materials. The essays, the introductory instruction sheet, and the two choice manipulation instruction sheets that were employed in the modified procedure conditions of experiment one were used in

this experiment. Subjects in the current study also received one of four different instruction sheets that outlined the conditions under which they were to formulate their attribution.

Procedure. The procedure was identical to that used in experiment one with the following exceptions. Groups of four to seven subjects were randomly assigned to non-group discussion conditions within experimental sessions. Participants in these sessions were seated at non-adjacent tables in a large classroom/laboratory. Before receiving the folder containing the information package these subjects were told that they would be performing different tasks. The experimenter therefore emphasized to the subjects that they should carefully follow the instructions outlined within their folder and not concern themselves with the actions of the other participants. An additional instruction sheet, placed within the information package immediately after the essay, determined whether a given participant was assigned to the control, delayed judgment, or expected group discussion condition. In the control condition the message on this additional sheet stated:

"AT THIS TIME WE WOULD LIKE YOU TO TURN
TO THE MAJOR EXPERIMENTAL
QUESTIONNAIRE. PLEASE READ ALL THE
QUESTIONNAIRE ITEMS THROUGH ONCE AND

THEN ANSWER THE QUESTIONS. i.e., DON' T
ANSWER ANY QUESTION UNTIL YOU HAVE READ
THROUGH ALL THE QUESTIONS".

A hand-printed message at the head of the sheet said, "READ THIS CAREFULLY" (See Appendix J). In the delayed judgment conditions the messages "READ THIS CAREFULLY" and "RAISE YOUR HAND" were hand-printed at the head of the page and the foot of the page, respectively. The text of the message on the additional instruction sheet stated:

"AT THIS TIME WE WOULD LIKE YOU TO
PAUSE! DO NOT TURN TO THE MAJOR
QUESTIONNAIRE YET. INSTEAD, READ THE
REST OF THE INFORMATION ON THIS PAGE
AND THEN RAISE YOUR HAND! IN A FEW
MINUTES WE WOULD LIKE YOU TO READ
THROUGH ALL THE QUESTIONNAIRE ITEMS AND
SPEND 10 FULL MINUTES THINKING ABOUT
THE RESPONSES YOU WISH TO MAKE TO THESE
QUESTIONS. YOUR EXPERIMENTER WILL
INFORM YOU WHEN THE 10 MINUTE PERIOD IS
TO BEGIN AND WHEN IT HAS ELAPSED. WE
WOULD THEN LIKE YOU TO RECORD YOUR
RESPONSES TO THE QUESTIONS. TO REPEAT,
WE DO NOT WANT YOU TO ACTUALLY RECORD
ANY OF YOUR RESPONSES UNTIL THE TEN

MINUTE PERIOD HAS ELAPSED." (See
Appendix K)

In the expected group discussion conditions, hand-printed messages similar to those mentioned in the delayed judgment conditions were placed at the head and the foot of the instruction sheet. The text of the message on the additional instruction sheet stated:

"AT THIS TIME WE WOULD LIKE YOU TO
PAUSE! DO NOT TURN TO THE MAJOR
QUESTIONNAIRE YET. INSTEAD, READ THE
REST OF THE INFORMATION ON THIS PAGE
AND THEN RAISE YOUR HAND! IN A FEW
MINUTES WE WOULD LIKE YOU TO READ
THROUGH ALL THE QUESTIONNAIRE ITEMS AND
PREPARE TO DISCUSS YOUR FEELINGS ABOUT
THESE QUESTIONS WITH SOME OF THE OTHER
PARTICIPANTS IN THIS SESSION. WE HAVE
ENSURED THAT THESE OTHER PARTICIPANTS
HAVE RECEIVED THE SAME INFORMATION AND
QUESTIONNAIRE THAT YOU HAVE RECEIVED.
PLEASE NOTE THAT THE QUESTIONS YOU WILL
DISCUSS WERE RANDOMLY SELECTED FROM A
LARGER POOL OF ITEMS. WE WOULD LIKE YOU
TO TAKE 10 FULL MINUTES TO PREPARE FOR
THIS DISCUSSION. YOUR EXPERIMENTER WILL
INFORM YOU WHEN THE 10 MINUTE PERIOD IS

TO BEGIN AND WHEN IT HAS ELAPSED. TO REPEAT, WE DO NOT WANT YOU TO ACTUALLY RECORD ANY OF YOUR RESPONSES DURING THE 10 MINUTE PREPARATION PERIOD." (See Appendix L)

When subjects in the non-group discussion conditions began to raise their hands, the experimenter said, "Some of you are being asked to pause in your task and raise your hand. If you have reached this point, please sit quietly for a minute. If you have not been given this particular instruction, please carry on with your task." When the experimenter verified that all the delayed judgment and expected group discussion condition subjects in the session had raised their hands, he said, "Okay, to those of you who were asked to pause let me say that the 10-minute period begins now. Please turn to the major questionnaire and spend the next 10 minutes carrying out your instructions. Let me remind you that we do not want you to actually record your responses to the questions during this 10-minute period. I will inform you when the 10-minute period is over". The experimenter then started a stopwatch. When 10 minutes had elapsed the experimenter said, "Okay, the 10-minute period is over. Could I have you record your responses to the questionnaire items now and then we'll move on to the next phase of the

experiment?"

The questionnaire was comprised of the first six items from the questionnaire that was administered to subjects in the modified procedure condition of experiment one. In order to ensure that the subjects in the group discussion conditions would have time to reach the item that represented the dependent measure, this item was moved from the sixth to the second position on the questionnaire (See Appendix M). A hand-printed message at the head of the first questionnaire page stated, "CONSIDER EACH QUESTION CAREFULLY. RECALL THE INITIAL INSTRUCTIONS". Once the questionnaire was completed the experimenter presented the subjects with a second questionnaire. On the first page of this questionnaire, subjects were asked to rate the persuasiveness of the essay they had read on a 9-pt. scale, 1(Not very persuasive at all) to 9(Very persuasive), and to state whether or not the author of the essay was free to select the stance of the essay. On the second page of this questionnaire subjects were asked to respond to the following question:

"Please recall that in the major questionnaire you were asked to judge the essay writer's true belief regarding the issue of western separatism. We are interested in

knowing WHY you answered this question the way you did. More specifically, we want to know, as precisely as possible, all the steps you went through in your mind to reach your response. If your judgment was the result of an involved analysis in which you weighed several factors in a 'conversation in your head' , please report as thoroughly as possible what that conversation consisted of. Please include any thoughts you had that may help us understand exactly why you made your response. You may use the back of this page if you need more room. Please try to complete this task within 5 or 6 minutes. Thank you for your co-operation." (See Appendix N)

A message on this questionnaire asked subjects to seal the completed questionnaire in the envelope to ensure the confidentiality of their responses.

In the group discussion condition sessions, five subjects were seated along a row of tables that were arranged into a semi-circle. In these sessions, all five subjects received the same information package. As

in the non-group discussion conditons, an additional instruction sheet was included in the information package immediately after the essay. In this condition the message stated:

AT THIS TIME WE WOULD LIKE YOU TO TURN
TO THE EXPERIMENTAL QUESTIONNAIRE.
HOWEVER, WE DO NOT WANT YOU TO RESPOND
TO THE QUESTIONNAIRE ITEMS
IMMEDIATELY!! RATHER, WE WOULD LIKE YOU
TO READ THROUGH ALL THE ITEMS AND THEN
BEGIN TO DISCUSS YOUR FEELINGS ABOUT
THESE QUESTIONS WITH THE OTHER 4
PARTICIPANTS IN THIS SESSION. WE HAVE
ENSURED THAT THESE OTHER PARTICIPANTS
HAVE RECEIVED THE SAME INFORMATION AND
QUESTIONNAIRE THAT YOU HAVE RECEIVED.
PLEASE NOTE THAT THE QUESTIONS YOU WILL
DISCUSS WERE RANDOMLY SELECTED FROM A
LARGER POOL OF ITEMS. WE WOULD LIKE THE
DISCUSSION TO TAKE 10 FULL MINUTES.
YOUR EXPERIMENTER WILL TELL YOU WHEN TO
BEGIN AND WHEN TO TERMINATE YOUR
DISCUSSION. PLEASE BEGIN YOUR
DISCUSSION WITH ITEM #1 AND WORK DOWN
THE PAGE IN ITEM SEQUENCE. PLEASE DO
NOT ACTUALLY RECORD YOUR RESPONSES TO
ANY OF THE QUESTIONS UNTIL THE

DISCUSSION HAS BEEN COMPLETED." (See Appendix 0)

A hand-printed message at the head of this instruction sheet stated, "READ THIS CAREFULLY". When the experimenter noted that all five subjects had begun to peruse the questionnaire items he said, "Okay, as you've all read, I would like you to discuss these questions. I want this to be a lively discussion and I want everyone to participate. Please start the discussion with question #1 and work your way down to question #6. I would like you to treat this task seriously. Please spend the entire 10 minutes discussing the questions. Don't actually record your responses to these questions yet. Now since people are sometimes reluctant to begin discussions could I have you (the experimenter pointed to a subject sitting in a previously designated seat) begin the discussion if no one else does? Okay, we'll start the 10 minute period now. I'll leave the room so I won't inhibit you." The experimenter then retired to an anteroom, started a stopwatch, and prepared to transcribe those portions of the discussion which pertained to the dependent measure question. The experimenter also recorded the length of time that the group discussed the critical (attribution) question. When the 10-minute period elapsed the experimenter re-entered the room, stopped

the discussion, and asked the participants to complete, individually, the questionnaire. After subjects had completed the questionnaire, they were provided with a second questionnaire. This questionnaire was identical to that used in the non-group discussion conditions with one exception. The sentence, "If your decision changed or evolved because of something that was mentioned in the discussion, please report the relevant details." was included into the body of question #3. When all the subjects had sealed the completed questionnaire in the envelope they were debriefed fully.

Results

Attribution of Attitudes. Because the unit of analysis in the group discussion judgment conditions was groups rather than individuals, one questionnaire was selected randomly from the 5 questionnaires that were completed within each group discussion session. The responses from this "representative" were employed in the analyses². A 4 X 2 X 2 analysis of variance conducted on the attitude attribution measures revealed a significant main effect for essay direction $F(1,208) = 243.09, p < .001$. This effect was qualified, however, by a significant Choice X Essay Direction interaction $F(1,208) = 25.75, p < .001$. As predicted, the Essay Direction X Judgmental Context interaction within the

no-choice condition was significant $F(3,208) = 2.80$, $p < .05$ while the Essay Direction X Judgmental Context interaction within the choice condition failed to reach statistical significance $F(3,208) = 2.0$ n.s. The Choice X Essay Direction X Judgmental Context interaction, however, was only marginally significant $F(3,208) = 2.37$, $p < .07$ (see Appendix P). According to a Newman-Keuls analysis, the responses of pro essay condition subjects were significantly greater than the responses of con essay condition subjects in the control, delayed judgment, expected group discussion judgment, and the group discussion judgment conditions within choice conditions (see Table 3). However, within the no-choice condition the responses of pro essay condition subjects were significantly greater than the responses of con essay condition subjects in the control, the delayed judgment and the expected group discussion judgment conditions but not in the group discussion judgment condition. These findings indicate that group discussion of the attitude attribution question attenuates the dispositional bias whereas delay per se and expected discussion do not attenuate the bias.

The validity of these results is dependent, however, on whether or not the attitude ascriptions made by the "representative" attributors and the group members whose responses were not included in the

Table 3

Mean Attributions of Attitudes Toward Western Separatism				
		<u>Judgmental Context</u>		
		Control	Delayed	Expected Discussion Group Discussion
No-Choice	Pro Essay	5.9 _{ef}	6.4 _{ef}	7.0 _f 4.9 _{de}
	Con Essay	3.2 _{bcd}	3.3 _{bcd}	3.4 _{bcd} 4.0 _{cd}
Choice	Pro Essay	7.1 _f	7.4 _f	6.8 _f 7.1 _f
	Con Essay	1.3 _a	1.5 _{ab}	2.9 _{abc} 2.5 _{abc}

Note: The greater the mean, the more favourable the attributed attitude toward western separatism on the 9-point scale. Means not sharing a common subscript differ at $p < .05$ using the Newman-Keuls procedure.

Table 4

Correlations Between Subjects' Attitude
Attributions and Essay Persuasiveness Ratings

		<u>Judgmental Context</u>			
		Control	Delayed	Expected Discussion	Group Discussion
No-Choice	Pro Essay	-0.23	0.09	0.35	0.03
	Con Essay	-0.15	0.12	-0.10	0.11
Choice	Pro Essay	-0.19	0.11	0.03	-0.03
	Con Essay	0.12	-0.33	-0.21	0.03

*p<.05

analyses are comparable in each of the four group discussion conditions. The attitude ascriptions of the "representative" attributors and the other attributors within the four group discussion conditions were therefore compared by means of a $2 \times 2 \times 2$ analysis of variance. According to this analysis, the attributor main effect, and the Attributor \times Choice, Attributor \times Essay Direction, and Attributor \times Choice \times Essay Direction interactions all failed to reach statistical significance ($F < 1$), (see Appendix Q). The attribution responses of the "representative" attributors and the other attributors are therefore comparable in the four group discussion conditions.

Ancillary Measures. Although the essays had been judged previously by pre-test subjects to be moderately persuasive ($M = 4.9$, overall), subjects rated them as being moderately unpersuasive ($M = 3.9$, overall). Subjects' attitude attribution responses were correlated with their ratings of the persuasiveness of their essay. Correlations were computed separately for each of the sixteen experimental conditions and are reported in Table 4. Inspection of these correlations reveals that the attribution responses were not related to the persuasiveness ratings in any of the experimental conditions. Furthermore, when the data were collapsed into pro and con conditions and the

correlations were recomputed, no evidence of a relationship between these two measures was found ($r = 0.00$ in pro conditions; $r = -0.08$ in con conditions). On the basis of this evidence, then, subjects in this experiment do not appear to have based their attributions on perceived essay persuasiveness. An analysis of the responses to the question regarding whether or not the author was free to select the stance of the essay revealed that 16 of the 224 subjects answered this question incorrectly. Nine, six, one, and zero incorrect responses were recorded by subjects in the group discussion judgment, expected discussion judgment, delay judgement, and control conditions, respectively.

Analyses of the group discussions: no-choice conditions. Subjects in the no-choice group discussion judgment conditions spent an average of 108 sec. of the total 600 sec. discussion period discussing matters pertaining to the dependent measure questionnaire item. Two independent raters reached 100% agreement concerning the following features of the discussions. Ten of the 28 no-choice condition discussions began with an explicit statement that the author's attitude was consistent with the position expressed in the essay. In 7 of the remaining no-choice conditions the discussion began with a statement regarding the

importance of the constraint information to the task.

The constraint instructions were explicitly mentioned in 17 of the 28 conditions. The attitude attributions made by the representative attributors in pro essay and con essay conditions within this sample of 17 sessions did not differ. However, the responses made by the representative attributors in those sessions in which the constraint information was not mentioned did not differ in pro and con essay conditions either. Moreover, in only 9 of the 17 sessions in which the constraint information was explicitly mentioned did this information prompt another group member to suggest that this fact makes it difficult to estimate the author's opinion. In 7 of these 9 sessions the focus of the discussion shifted, or returned, to the importance of essay features, i.e., essay strength, to the attributional task. Typical comments in the above-mentioned 7 group discussion sessions were, "he would've used stronger arguments if he wanted to separate"; "if he was against separatism he wouldn't spend so much time on specific issues"; "he'd be more believable if he had stronger arguments". In the remaining 8 sessions in which the constraint information was mentioned, the discussion, subsequent to the statement regarding the constraints, focused exclusively on the importance of essay strength to the

attributional task. Typical statements in the above-mentioned 8 sessions were, "you can tell he's con despite the constraints"; "his arguments are strongly pro, though".

In the 11 sessions in which the constraint information was not mentioned explicitly the discussion focused on the importance of essay strength to the attributional task. In 4 of the 28 no-choice sessions a group member suggested that the weakness of the author's essay might indicate that the author holds a view contrary to that expressed in the essay. In two of the sessions, a group member stated that it would be very difficult to write a strong pro essay if one actually held a con opinion. These statements provide some evidence for Miller and Rorer's (1982) interpretation of the dispositional bias. In none of the group discussions was it mentioned that the author could easily have produced a pro (con) essay despite holding a con (pro) attitude on the target issue.

Analyses of the group discussions: choice conditions. Subjects in the choice group discussion judgment conditions spent an average of 77 seconds out of the total 600 second period discussing matters pertaining to the dependent measure. In virtually every one of the choice condition discussion sessions the discussion centered around either the relevance of

features of the essay i.e., essay strength, number of arguments, or the choice information to the attribution task. However, in 5 of the choice sessions it was noted that choosing a position indicates that one is more, and perhaps only slightly more, supportive of that position than the alternative position. In 2 of the choice sessions it was noted that the author may have selected the stance that was most interesting to write on, regardless of his/her attitude toward the target issue.

Analyses of attribution explanations: no-choice conditions. Two independent raters reached 100% agreement on the following features of the explanation reports. Thirty-three of 112 no-choice condition subjects (29%) mentioned the constraint instructions in their report (control condition = 10 subjects, delayed judgment condition = 5 subjects, expected group discussion judgment condition = 11 subjects, and group discussion judgment condition = 7 subjects). Furthermore, one person in the group discussion condition stated that the mention of the constraint information in the discussion led her to change her attribution from an essay-consistent estimate to a neutral estimate. However, 24 of the 33 subjects who mentioned the constraint instructions in their report (72%) stated that their decision was based at least as

much on essay features as on the constraint information. Only 9 of these 33 subjects concluded that the target person's attitude was indeterminable because of the constraints.

Further inspection of the reports revealed that 8 of the 112 subjects (7%) noted that it would be very difficult to write a strong pro (con) essay under constraint if one's true attitude was con (pro). Only one subject mentioned that a persuasive essay could easily be written by a person who held an opinion opposite to that expressed in the essay. Furthermore, 8 subjects (7%) stated that the weakness of the essay suggests that the author holds an attitude opposite to that which was expressed in the essay. These findings lend additional support to Miller and Rorer's (1982) interpretation of the dispositional bias.

Argument quality, i.e., cogency or strength, was cited as an attribution basis in 38 of the reports (34%). The amount of knowledge or the degree of familiarity that the author appeared to have was cited in 14 of the reports (12%). Other influencing factors that were mentioned with some degree of frequency in the reports were: the number of points mentioned in the essay (7%), how convincing the essay was (6%), the degree of emotion expressed in the essay (6%), the essay direction (4%), essay persuasiveness (4%), and

the use of certain words in the essay (3%).

Analyses of attribution explanations: choice conditions. In virtually all the reports subjects cited argument quality, the author's apparent knowledge of the target issue, and/or the choice information as bases for their attribution. However, 8 of the 112 subjects noted that the choice information might conceivably convey that the author's attitude is only slightly more in the direction of the selected position than the non-selected position. One subject noted that the author may have chosen to write on the most interesting position irrespective of his/her true attitude on the target issue.

Discussion

The results of Experiment 2 supported the main hypothesis of the present research. The tendency of perceivers to make dispositionally-biased attributions for behavior performed under constraint was not only reduced, but eliminated, when attributors were instructed to render their judgment after a group discussion of the critical attribution question. However, the results of this study provide no support for the notions that increased thought about the attribution question or the expectation of discussing this and other questions influences the dispositional bias effect. The results concerning increased thought

are compatible with Bierbrauer's (1979) finding that lengthy contemplation about behavior performed under constraint does not alter the tendency of observers to attribute behavior-consistent dispositions to the target person.

The pattern of results in Experiment 2 indicates that the group discussion effect on attitude attributions is not a consequence of the cognitive state engendered by the expectation of transmitting or receiving information. Nor is the effect caused by involved reflection on the attribution question. It may be the case, however, that subjects who have spent 10 minutes discussing the questionnaire items conclude that these items are quite important. Consequently, they may answer the questions with more care than would the non-group discussion condition subjects (Kassin & Hochreich, 1977). However, if subjects' responses are based on the perceived importance of the questionnaire items, subjects in the expected group discussion conditions should render less dispositionally-biased judgments than subjects in the delayed judgment or control conditions. This result did not obtain. Additional control conditions are required, however, to rule out conclusively this interpretation of the results. Nevertheless, it seems likely that the group discussion phenomenon is mediated by factors associated

with the exchange of information in the group discussion itself.

It was proposed that group discussion might attenuate the dispositional bias because some subjects might learn about arguments in the discussion that challenge the notion that the author's attitude can be gauged from the position and strength of his/her essay. Whether these subjects would then 1) cease to base their attributions on essay strength or 2) base their attributions on other factors in addition to essay strength was unclear.

The group discussion transcripts and the attribution explanation reports provide some support for these notions. Both the transcripts and the reports revealed that many subjects were exposed to arguments in the discussion that they hadn't previously considered. The transcripts and reports also indicated that at least some subjects made either dramatic or minor adjustments to their attributions after the constraint information was raised in the discussion. However, if subjects in the group discussion judgment conditions generally were less likely than subjects in the non-group discussion judgment conditions to base their attributions on essay strength the correlation between perceived essay persuasiveness and attitude attribution should be smaller in the former conditions

than in the latter conditions. The correlations in these two conditions were, however, similar and non-significant. Furthermore, the attribution explanation reports revealed that essay strength was a major determinant of attributions in the group discussion judgment conditions as well as in the non-group discussion judgment conditions. Moreover, the discussion transcripts indicated that subjects in the group discussion judgment condition attached considerable importance to the strength and quality of the essay.

It appears, then, that the group discussion effect on attributions occurs because some subjects base their attributions on factors in addition to essay strength. However, this effect is not mediated by the explicit mention of the constraint information in the discussion. Ancillary measures indicated that non-dispositionally-biased attributions were rendered by representative attributors from groups in which the constraint information was, and was not mentioned. Furthermore, according to the attribution explanation reports, group discussion judgment condition subjects were not more inclined to base their attributions on constraint information than were subjects in the non-group discussion judgment conditions.

These findings suggest that the group discussion

effect may be caused by processes other than those that were originally suggested. One possible explanation for the group discussion effect is that group discussion induces attributors to render moderate judgments. This argument is weakened, however, by the fact that group discussion had no effect on attributions in the choice conditions. The extant theoretical accounts of the group-induced shift phenomenon, as well, offer little to an understanding of the present group discussion effect. More specifically, the diffusion-of-responsibility theory (Wallach & Kogan, 1965) holds that group experience reduces anxiety about the possible negative consequences of making a risky decision. Familiarization theory (Bateson, 1966) holds that increased item familiarity enhances people's willingness to take risks because of an increased feeling of certainty. These two theories attempt to account for a polarization, rather than an attenuation, of initially-held attitudes and are concerned only with risk-related decisions. Leader-confidence theory (Burnstein, 1969) suggests that group-induced rational shifts occur because the advocate of the reasonable position is likely to be highly confident and, therefore, persuasive. However, the group discussion transcripts do not provide evidence that advocates of non-correspondent positions were more confident than advocates of other positions.

Another possible explanation for the effect is that group members think about the possible arguments that could account for the various opinions that are offered in the discussion. More specifically, Miller and Rorer (1982) and Jones (1979) have suggested that many subjects in no-choice conditions initially base their judgment on essay strength. During group discussion, however, group members may learn that other members hold different, and perhaps less essay-consistent views than their own. The perception that a non-essay-consistent view may be defensible might prompt subjects to consider the arguments that could support this view (Burnstein, Vinokur, & Trope, 1973). Miller and Rorer (1982) have suggested that many attributors have some awareness of the constraint information. Thus, subjects might consider this information when attempting to understand the basis of the other group members' judgments. An enhanced appreciation of the constraint information may then induce subjects to shift their judgments in a direction opposite to that expressed in the essay.

The above analysis is based, in part, on the evidence from the attribution explanation reports and the discussion transcripts that attributions are based on essay strength in all experimental conditions. However, the correlation between attitude attribution

and perceived essay persuasiveness was found to be non-significant in all the conditions of this experiment. Conceivably, if a composite measure of essay strength, i.e., persuasiveness, number of arguments, argument cogency, had been used in this study a correlation between these two factors might have been detected. It is also possible that the correlation between perceived essay persuasiveness and attribution failed to reach statistical significance in this study because the sample of essays was restricted to those that had previously been judged to be of a moderate level of persuasiveness.

An important finding of the present research was the evidence from the content of the group discussions that Miller and Rorer's (1982) and Jones' (1979) conceptualizations of the dispositional bias have some merit. The strategy of having subjects engage in a group discussion about a decision may prove useful in identifying the processes underlying other cognitive phenomena.

The current findings do not provide a definitive explanation of the process by which group discussion influences attitude attributions. Future research should address this issue. This study does, however, provide compelling evidence that group discussion attenuates the dispositional bias, and therefore places

an important boundary condition on the dispositional bias effect. Contrary to current opinion (Jones, 1979), attributors may be unlikely to make dispositionally-biased attributions in naturalistic contexts in which judgments are rendered after a group discussion (e.g., jury situations, parole board deliberations, graduate school selection meetings).

The present investigation also highlights an important limitation in attribution research. Specifically, attribution research has focused exclusively on when and how individual perceivers form attributions. However, as the present findings indicate the results of such studies may have limited generality. There is, therefore, a clear need to assess the impact of group discussion on other attributional tendencies (e.g., the underutilization of consensus information, the attribution perseverance phenomenon, the personalism phenomenon).

Endnotes

1. Many investigators have referred to the tendency for attributors to underestimate the impact of situational factors and to overestimate the role of dispositional factors in controlling behavior as the "fundamental attribution error" (e.g., Ross, 1977; Jones, Riggs, and Quattrone, 1979). However, as Kelley and Michela (1980) have noted, it is inappropriate to characterize this phenomenon as an error since defensible accuracy criteria are currently unavailable. Consequently, the label "dispositional bias", used by some investigators to describe this phenomenon (e.g. Bierbrauer, 1979), was employed in this dissertation.

2. An experimental design in which subjects are nested within groups which are in turn nested within conditions usually is analyzed differently than is done here. Specifically, one usually tests for an effect for groups within conditions and, if the effect is significant, groups rather than subjects is used as the error term. The current design is a special case, however, in that the subjects were assigned randomly to conditions within groups for all but the group discussion conditions. As a result, using groups within conditions as the error term for the group discussion conditions would have meant that different error terms would have to be used depending on which comparisons

were made, no overall interaction tests could have been performed, and posttests (e.g., Newman-Keuls) could not have been conducted. The current approach allows for a straightforward analysis of the data.

References

- Allport, H. Social psychology. Boston: Houghton Mifflin, 1924.
- Ajzen, I., Dalto, C. A., & Blyth, D. P. Consistency and bias in the attribution of attitudes. Journal of Personality and Social Psychology, 1979 37, 1871-1876.
- Bateson, N. Familiarization, group discussion, and risk-taking. Journal of Experimental Social Psychology, 1966, 2, 119-129.
- Brierbrauer, G. Why did he do it? Attribution of obedience and the phenomenon of dispositional bias. European Journal of Social Psychology, 1979, 9, 67-84.
- Brown, R. Social psychology. New York: Free Press, 1965.
- Burnstein, E. An analysis of group decisions involving risk ("the risky shift"). Human Relations, 1969, 22, 381-395.
- Burnstein, E., Vinokur, A., & Trope, Y. Interpersonal comparison versus persuasive argumentation: A more

direct test of alternative explanations for group-induced shifts in individual choice. Journal of Experimental Social Psychology, 1973, 9, 236-245.

Doise, W. Intergroup relations and polarization of individual and collective judgments. Journal of Personality and Social Psychology, 1969, 12, 136-143.

Ericsson, K. A., & Simon, H. A. Verbal reports as data. Psychological Review, 1980, 87, 3, 215-251.

Gough, C., & Fraser, C. A. A further demonstration of group polarization. European Journal of Social Psychology, 1972, 2, 95-97.

Grice, H. P. Logic and conversation. In D. Davidson and G. Harmon (Eds.), The logic of grammar. Encino: Dickenson, 1975.

Harvey, J. H., Harkins, S. G., & Kagehiro, D. K. Cognitive tuning and the attribution of causality. Journal of Personality and Social Psychology, 1976, 34, 708-715.

Harvey, J. H. & Weary, G. Perspectives on attributional processes. Dubuque: W. C. Brown Co., 1981.

Heider, F. Social perception and phenomenal causality.
Psychological Review, 1944, 51, 358-374.

Heider, F. The psychology of interpersonal relations.
New York: John Wiley & Sons, 1958.

Jones, E. E. The rocky road from acts to dispositions.
American Psychologist, 1979, 34, 107-117.

Jones, E. E. & Davis, K. E. A theory of correspondent inferences: From acts to dispositions. In L. Berkowitz (Ed.), Advances in Experimental Social Psychology (Vol. 2). New York: Academic Press, 1965.

Jones, E. E. & Harris, V. A. The attribution of attitudes. Journal of Experimental Social Psychology, 1967, 3, 1-24.

Jones, E. E., Kanouse, D. E., Kelley, H. H., Nisbett, R. E., Valins, S., & Weiner, B., (Eds.),
Attribution: Perceiving the causes of behavior.
Morristown, N. J.: General Learning Press, 1972

Jones, E. E., Riggs, J. M., & Quattrone, G. Observer bias in the attitude attribution paradigm: Effect of time and information order. Journal of

Personality and Social Psychology, 1979, 37, 1230-1238.

Jones, E. E., Worchel, S., Goethals G. R., & Grumet, J. Prior expectancy and behavioral extremity as determinants of attitude attribution. Journal of Experimental Social Psychology, 1971, 7, 59-80.

Kahneman, D. & Tversky, A. On the study of statistical intuition. Cognition, 1982, 11, 123-141.

Kassin, S. M. & Hochreich, D. J. Instructional set: A neglected variable in attribution research? Personality and Social Psychology Bulletin, 1977, 3, 620-623.

Kelley, H. H. Attribution theory in social psychology. In D. Levine (Ed.), Nebraska symposium on motivation (Vol. 15). Lincoln: University of Nebraska Press, 1967.

Kelley, H. H. Attribution in social interaction. In E. E. Jones, D. E. Kanouse, H. H. Kelley, R. E. Nisbett, S. Valins, and B. Weiner (Eds.), Attribution: Perceiving the causes of behavior. Morristown, N. J.: General Learning Press, 1972.

Kelley, H. H., & Michela, J. L. Attribution theory and research. Annual Review of Psychology, 1980, 31, 457-501.

Kogan, N., & Wallach, M. A. Risk taking: A study in cognition and personality. New York: Holt, Rinehart & Winston, 1964.

Laughlin, P. R., Kerr, N., Davis, J., Halff, H., & Marciniak, K. Group size, member ability, and social decision schemes on an intellectual task. Journal of Personality and Social Psychology, 1975, 31, 522-535.

Laughlin, P. R., Kerr, N. L., Munch, M. M., Haggarty, D. A. Social decision schemes of the same four-person groups on two different intellectual tasks. Journal of Personality and Social Psychology, 1976, 33, 80-88.

Lopes, L. L. A unified integration model for "prior expectancy and behavioral extremity as determinants of attitude attribution." Journal of Experimental Social Psychology, 1972, 8, 156-160.

Milgram, S. Behavioral study of obedience. Journal of Abnormal and Social Psychology, 1963, 67, 371-378.

- Miller, A. G. Perceived freedom and the attribution of attitudes. Representative Research in Social Psychology, 1974, 5, 61-80.
- Miller, A. G. Constraint and target effects in the attribution of attitude. Journal of Experimental Social Psychology, 1976, 12, 325-339.
- Miller, A. G., Baer, R., & Schonberg, P. The bias phenomenon in attitude attribution: Actor and observer perspectives. Journal of Personality and Social Psychology, 1979, 37, 1421-1437.
- Miller, A. G., Jones, E. E., & Hinkle, S. A robust attribution error in the personality domain. Journal of Experimental Social Psychology, 1981, 17, 587-600.
- Miller A. G., Mayerson, N., Pogue, M., & Whitehouse, D. Perceivers' explanations of their attributions of attitude. Personality and Social Psychology Bulletin, 1977, 3, 111-114.
- Miller, A. G., & Rorer, L. G. Toward an understanding of the fundamental attribution error: Essay diagnosticity in the attitude attribution paradigm. Journal of Research in Personality,

1982, 16, 41-59.

Miller, D. T., Norman, S. A., & Wright, E. F.

Distortion in person perception as a consequence of need for effective control. Journal of Personality and Social Psychology, 1978, 36, 593-607.

Moscovici, & Zavalloni, M. The group as a polarizer of attitudes. Journal of Personality and Social Psychology, 1969, 12, 125-135.

Myers, D. G. & Bishop, G. D. Discussion effects on racial attitudes. Science, 1970, 169, 778-779.

Myers, D. G. & Bishop, G. D. Enhancement of dominant attitudes in group discussion. Journal of Personality and Social Psychology, 1971, 20, 386-391.

Napolitan, D. A., & Goethals, G. R. The attribution of friendliness. Journal of Experimental Social Psychology, 1979, 15, 105-113.

Nisbett, R. E., & Wilson, T. D. Telling more than we can know: Verbal reports on mental processing. Psychological Review, 1977, 84, 231-259.

Nisbett, R.E., Zukier, H., & Lemley, R. The dilution effect: Nondiagnostic information weakens the effect of diagnostic information. Cognitive Psychology, 1981, 13, 248-277.

Orne, M.T. The demand characteristics of an experimental design and their implications. Paper presented at the meeting of the American Psychological Association, Cincinnati, September, 1959.

Pruitt, D.G., & Teger, A.I. Is there a shift toward risk in group discussion? If so, is it a group phenomenon? If so, what causes it? Paper presented at the meeting of the American Psychological Association, Washington, D.C., September, 1967.

Reeder, G. D. & Brewer, M. B. A schematic model of dispositional attribution in interpersonal perception. Psychological Review, 1979, 86, 61-79.

Rosenthal, R. & Rosnow, R. L. Artifact in behavioral research. New York: Academic Press Inc., 1969.

Ross, L. The intuitive psychologist and his shortcomings: Distortion in the attribution process. In L. Berkowitz (Ed.), Advances in

experimental social psychology (vol.12). New York: Academic Press, 1977.

Schneider, D. J., & Miller, R. S. The effects of enthusiasm and quality of arguments on attitude attribution. Journal of Personality, 1975, 43, 693-708.

Sherif, M. A study of some social factors in perception. Archives of Psychology, 1935, No.187.

Snyder, M., & Jones, E. E. Attitude attribution when behavior is constrained. Journal of Experimental and Social Psychology 1974, 10, 585-600.

Stoner, J.A.F. A comparison of individual and group decisions involving risk. Unpublished master's thesis, School of Industrial Management, Massachusetts Institute of Technology, 1961.

Thomas, E. J., & Fink, C. F. Models of group problem-solving. Journal of Abnormal and Social Psychology, 1961, 63, 53-63.

Thorndike, R. L. The effect of discussion upon the correctness of group decisions, when the factor of majority influence is allowed for. Journal of

Social Psychology, 1938, 9, 343-362.

Tversky, A., & Kahneman, D. Judgment under uncertainty: Heuristics and biases. Science, 1974, 185, 1124-1131.

Wallach, M. A., & Kogan, N. The roles of information, discussion, and consensus in group risk taking. Journal of Experimental Social Psychology, 1965, 1, 1-19.

Wells, G. L., & Harvey, J. H. Do people use consensus information in making causal attributions? Journal of Personality and Social Psychology, 1977, 35, 279-293.

Wells, G. L., Petty R. E., Harkins, S. G., Kagehiro, D., & Harvey, J. H. Anticipated discussion of interpretation eliminates actor-observer differences in the attribution of causality. Sociometry, 1977, 40, 247-253.

Zajonc, R. B. The process of cognitive tuning in communication. Journal of Abnormal and Social Psychology, 1960, 61, 159-167.

APPENDIX A

As your experimenter has informed you the Psychology Department is interested in gathering information from members of the student body regarding a number of currently topical issues. One of our aims is simply to determine the attitudes or positions held by students on these issues. We would therefore like to ask you to respond as best you can to the questions listed below. Please circle the number on the scale provided that corresponds to your feelings about each question. When you have completed the questionnaire please seal it in the envelope provided. This will ensure that your responses will not be associated with you.

The following questions are concerned with the issue of Western Separatism.

1. The Western Provinces have every right to leave confederation if they choose, free from interference from Ottawa.

1	2	3	4	5	6	7	8	9
Disagree					Agree			
Strongly					Strongly			

2. We need a federal government in Ottawa which strives

to distribute the wealth from the wealthy Western regions of Canada to the poorer areas of the country.

1	2	3	4	5	6	7	8	9
Disagree						Agree		
Strongly						Strongly		

3. Past and present federal administrations have adopted policies which favour the Eastern industrial provinces at the expense of western provinces---a state of affairs which warrants the most extreme action by the West.

1	2	3	4	5	6	7	8	9
Disagree						Agree		
Strongly						Strongly		

4. Separatism is a poor and impractical solution to the problems perceived by Westerners today.

1	2	3	4	5	6	7	8	9
Disagree						Agree		
Strongly						Strongly		

5. The Western provinces should separate from Canada.

1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---

Disagree
Strongly

Agree
Strongly

APPENDIX B

Questionnaire Instructions

You have been given 4 essays to read and evaluate. Please evaluate each essay immediately after you have read it. Then go on to next essay. For each essay, mark the essay code in the appropriate spot and then give your evaluation. Do not put your name anywhere on this sheet. When you have finished rating the fourth essay, please fold this sheet in half and wait for the experimenter to collect it. PLEASE DO NOT go back and change an evaluation after you have made it. Consider your evaluation carefully - your responses are important to us.

1) Essay Code:

	1	2	3	4	5	6	7	8	9	
	This essay is						This essay is			
	not very per-						very			.
persuasive										
	suasive at all									

2) Essay Code:

1 2 3 4 5 6 7 8 9

	This essay is	This essay is
	not very per-	very
persuasive		
	suasive at all	

3) Essay Code:

	1	2	3	4	5	6	7	8	9	
	This essay is						This essay is			
	not very per-						very			
persuasive										
	suasive at all									

4) Essay Code:

	1	2	3	4	5	6	7	8	9	
	This essay is						This essay is			
	not very per-						very			
persuasive										
	suasive at all									

APPENDIX C

EXPERIMENTAL INSTRUCTIONS

The Psychology Department is currently conducting a series of experiments investigating how people perceive and interpret social events. There are two parts to each of these experiments. In the first part, participants are asked to read pieces of information. In the second part, the participants are asked to respond to a series of questions. The nature of the information that is provided to participants is being varied from study to study within this project. In the present experiment, the information is in the form of essays written by undergraduate students.

At this time, we would like you to turn the page and read the message very carefully. Then turn the next page and read the essay. When you have finished reading the essay, turn to the next page and complete the questionnaire. Please seal the completed questionnaire and the rest of the materials in the envelope to ensure the confidentiality of your responses. Thank you very much.

PLEASE TURN TO THE NEXT PAGE

APPENDIX D

EXPERIMENTAL INSTRUCTIONS

The Psychology Department is currently conducting a series of experiments investigating how people perceive and interpret social events. There are two parts to each of these experiments. In the first part, participants are asked to read pieces of information. In the second part, the participants are asked to respond to a number of questions.

Please note that the type of information provided to participants is being varied within each of these studies. Therefore, the information that you have received may be different from that which is given to other participants in this experiment. You should also note that each participant in this study is being asked to respond to a set of questionnaire items that have been randomly selected from a larger pool of questions. Consequently, many of the questions you may be asked might seem poorly matched to the information you have received . That is, you may be asked to make judgments for which the information you were given is either irrelevant or insufficient for making that judgment. You should, therefore, not assume that the information you have received is directly relevant to each specific question you are asked . Nevertheless we would like you

to make your best attempt at answering all the questions provided.

At this time I would like you to re-read these instructions until they are clear. When you are certain that you understand the instructions, turn to the next page. Read the information on this page very carefully. Then turn to the next page and read the additional information. Once you have read all the information, turn to the main questionnaire and answer the questions. When you have completed the main questionnaire, please complete the supplemental questionnaire. Then seal all the materials in the envelope to ensure the confidentiality of your responses. Thank you.

APPENDIX E

ON THE FOLLOWING PAGES YOU WILL FIND AN ESSAY WRITTEN BY AN INTRODUCTORY PSYCHOLOGY STUDENT WHO PARTICIPATED IN A PSYCHOLOGY EXPERIMENT LAST YEAR. THE GOAL OF THAT PARTICULAR STUDY WAS TO COLLECT ARGUMENTS ON BOTH SIDES OF THE ISSUE OF WESTERN SEPARATISM. TO FACILITATE THIS GOAL, PARTICIPANTS WERE ASKED TO WRITE SHORT ESSAYS (3 OR 4 PARAGRAPHS IN LENGTH) EITHER FAVORING OR OPPOSING WESTERN SEPARATISM. ALL PARTICIPANTS WERE ALLOWED TO CHOOSE FOR THEMSELVES WHETHER THEIR ESSAY WOULD TAKE A PRO-WESTERN SEPARATISM OR AN ANTI-WESTERN SEPARATISM STANCE. ALL PARTICIPANTS WERE GIVEN TEN MINUTES TO COMPOSE THEIR ESSAY. PLEASE RE-READ THE MESSAGE ON THIS PAGE AND THEN TURN TO THE ESSAY ON THE SUBSEQUENT PAGES. WHEN YOU HAVE READ THE ESSAY, COMPLETE THE QUESTIONNAIRE THAT FOLLOWS THE ESSAY.

APPENDIX F

ON THE FOLLOWING PAGES YOU WILL FIND AN ESSAY WRITTEN BY AN INTRODUCTORY PSYCHOLOGY STUDENT WHO PARTICIPATED IN A PSYCHOLOGY EXPERIMENT LAST YEAR. THE GOAL OF THAT PARTICULAR STUDY WAS TO COLLECT ARGUMENTS ON BOTH SIDES OF THE ISSUE OF WESTERN SEPARATISM. TO FACILITATE THIS GOAL, PARTICIPANTS WERE ASKED TO WRITE SHORT ESSAYS (3 OR 4 PARAGRAPHS IN LENGTH) EITHER FAVORING OR OPPOSING WESTERN SEPARATISM. HOWEVER, THE PARTICIPANTS WERE NOT ALLOWED TO CHOOSE FOR THEMSELVES WHETHER THEIR ESSAY WOULD TAKE A PRO-WESTERN SEPARATISM OR AN ANTI-WESTERN SEPARATISM STANCE. RATHER, PARTICIPANTS WERE ASSIGNED BY THE EXPERIMENTER, AT RANDOM, TO WRITE EITHER A PRO OR AN ANTI ESSAY, REGARDLESS OF THEIR OWN TRUE BELIEFS ON THE ISSUE. ALL PARTICIPANTS WERE GIVEN TEN MINUTES TO COMPOSE THEIR ESSAY. PLEASE RE-READ THE MESSAGE ON THIS PAGE AND THEN TURN TO THE ESSAY ON THE SUBSEQUENT PAGES. WHEN YOU HAVE READ THE ESSAY, COMPLETE THE QUESTIONNAIRE THAT FOLLOWS THE ESSAY.

APPENDIX G.1

EXPERIMENTAL QUESTIONNAIRE

NOTE: DO NOT OPEN THIS QUESTIONNAIRE
UNTIL YOU HAVE FINISHED READING THE ESSAY!!!

APPENDIX G.2

Questionnaire Instructions

Please respond to the following questions. Consider your responses carefully - your judgments are very important to us. When you are finished seal this sheet in the envelope provided.

1. The true opinion of the person who wrote this essay is that the western provinces should separate from Canada.

1	2	3	4	5	6	7	8	9
Author does					Author			
strongly								
not believe this					believes this			

2. The true opinion of the person who wrote this essay is that the western provinces have every right to leave confederation if they chose, free from interference from Ottawa.

1	2	3	4	5	6	7	8	9
Author does					Author			
strongly								
not believe this					believes this			

at all

3. How persuasive would you say this essay is?

	1	2	3	4	5	6	7	8	9
	Not very per-						Very		
persuasive									
	suasive at all								

APPENDIX G.3

4. Was the author of the essay free to choose the position advocated in his/her essay?

Yes

No

DO NOT TURN BACK TO THE PREVIOUS PAGE OR PAGES

PLEASE SEAL THE COMPLETED QUESTIONNAIRE AND THE
OTHER MATERIALS IN THE ENVELOPE PROVIDED

APPENDIX H.1

EXPERIMENTAL QUESTIONNAIRE

NOTE: DO NOT OPEN THIS QUESTIONNAIRE UNTIL
YOU HAVE FINISHED READING THE PRECEDING INFORMATION!

Questionnaire Instructions : Please read all the questionnaire items through once before you answer any of the questions. To respond to an item, circle the number or option that reflects your opinion regarding the question.

NOTE: For the purposes of this questionnaire, the target person is THE AUTHOR OF THE ESSAY.

APPENDIX H.2

PLEASE CONSIDER EACH QUESTION CAREFULLY

RECALL THE INSTRUCTIONS

1. Do you think that the target person is a generally well organized person?

Yes No Can't say

2. What academic year do you think the target person is in?

First Second Third Fourth

3. Was the essay typed or handwritten?

Typed Handwritten

4. How well do you think the target person generally expresses himself/herself?

1	2	3	4	5	6	7	8	9
Not at all					Extremely			
well					well			

5. The true opinion of the person who wrote this essay

is that the western provinces should separate from
Canada.

	1	2	3	4	5	6	7	8	9		
	Author does					Author					
strongly											
	not believe this					believes this					
	at all										

6. How likely do you think it is that the target person
is interested in classical music?

	1	2	3	4	5	6	7	8	9		
	Not at all					Very likely					
	likely										

APPENDIX H.3

1. How persuasive would you say this essay is?

1	2	3	4	5	6	7	8	9
Not very per-						Very		
persuasive								
suasive at all								

2. Was the author of the essay free to choose the position advocated in his/her essay?

Yes

No

Appendix I

Summary of Analysis of Variance on Attitude Attributions (Experiment 1)

<u>Source</u>	<u>df</u>	<u>MS</u>	<u>F</u>
A (Procedure)	1	0.630	0.223
B (Choice)	1	0.047	0.017
AB	1	3.797	1.345
C (Essay Direction)	1	958.547	339.584**
AC	1	1.172	0.415
BC	1	159.505	56.508**
ABC	1	29.297	10.379*
Error	184	2.823	

* p < .002

** p < .001

APPENDIX J

ADDITIONAL INSTRUCTIONS TO PARTICIPANTS

AT THIS TIME WE WOULD LIKE YOU TO TURN TO THE MAJOR EXPERIMENTAL QUESTIONNAIRE. PLEASE READ ALL THE QUESTIONNAIRE ITEMS THROUGH ONCE AND THEN ANSWER THE QUESTIONS.i.e. - DON'T ANSWER ANY QUESTION UNTIL YOU HAVE READ THROUGH ALL THE QUESTIONS.

APPENDIX K

READ THIS CAREFULLY

ADDITIONAL INSTRUCTIONS TO PARTICIPANTS

AT THIS TIME WE WOULD LIKE YOU TO PAUSE. DO NOT TURN TO THE MAJOR QUESTIONNAIRE YET. INSTEAD, READ THE REST OF THE INFORMATION ON THIS PAGE AND THEN RAISE YOUR HAND. IN A FEW MINUTES WE WOULD LIKE YOU TO READ THROUGH ALL THE QUESTIONNAIRE ITEMS AND SPEND 10 FULL MINUTES THINKING ABOUT THE RESPONSES YOU WISH TO MAKE TO THESE QUESTIONS. YOUR EXPERIMENTER WILL INFORM YOU WHEN THE 10 MINUTE PERIOD IS TO BEGIN AND WHEN IT HAS ELAPSED. WE WOULD THEN LIKE YOU TO RECORD YOUR RESPONSES TO THE QUESTIONS. TO REPEAT, WE DO NOT WANT YOU TO ACTUALLY RECORD ANY OF YOUR RESPONSES UNTIL THE TEN MINUTE PERIOD HAS ELAPSED.

RAISE YOUR HAND

APPENDIX L
READ THIS CAREFULLY

ADDITIONAL INSTRUCTIONS TO PARTICIPANTS

AT THIS TIME WE WOULD LIKE YOU TO PAUSE. DO NOT TURN TO THE MAJOR QUESTIONNAIRE YET. INSTEAD, READ THE REST OF THE INFORMATION ON THIS PAGE AND THEN RAISE YOUR HAND. IN A FEW MINUTES WE WOULD LIKE YOU TO READ THROUGH ALL THE QUESTIONNAIRE ITEMS AND PREPARE TO DISCUSS YOUR FEELINGS ABOUT THESE QUESTIONS WITH SOME OF THE OTHER PARTICIPANTS IN THIS SESSION. WE HAVE ENSURED THAT THESE OTHER PARTICIPANTS HAVE RECEIVED THE SAME INFORMATION AND QUESTIONNAIRE THAT YOU HAVE RECEIVED. PLEASE NOTE THAT THE QUESTIONS YOU WILL DISCUSS WERE RANDOMLY SELECTED FROM A LARGER POOL OF ITEMS. WE WOULD LIKE YOU TO TAKE 10 FULL MINUTES TO PREPARE FOR THIS DISCUSSION. YOUR EXPERIMENTER WILL INFORM YOU WHEN THE 10 MINUTE PERIOD IS TO BEGIN AND WHEN IT HAS ELAPSED. TO REPEAT, WE DO NOT WANT YOU TO ACTUALLY RECORD ANY OF YOUR RESPONSES DURING THE 10 MINUTE PREPARATION PERIOD.

RAISE YOUR HAND

APPENDIX M.1

EXPERIMENTAL QUESTIONNAIRE

NOTE: DO NOT OPEN THIS QUESTIONNAIRE UNTIL YOU HAVE READ THE ADDITIONAL INSTRUCTIONS TO PARTICIPANTS ON THE PRECEDING PAGE. ONCE YOU HAVE READ THE ADDITIONAL INSTRUCTIONS TO PARTICIPANTS, PLEASE READ THE INFORMATION PRESENTED BELOW. THEN OPEN THIS QUESTIONNAIRE AND CARRY OUT YOUR INSTRUCTIONS PLEASE.

NOTE: To respond to a questionnaire item, circle the number or option that reflects your opinion regarding the question.

For the purposes of this questionnaire, the target person is THE AUTHOR OF THE ESSAY.

APPENDIX M.2

CONSIDER EACH QUESTION CAREFULLY

RECALL THE INITIAL INSTRUCTIONS

1. How well do you think the target person generally expresses himself/herself?

1	2	3	4	5	6	7	8	9
Not at all					Extremely			
well					well			

2. The true opinion of the person who wrote this essay is that the western provinces should separate from Canada.

1	2	3	4	5	6	7	8	9
Author does					Author			
strongly								
not believe this					believes this			
at all								

3. Do you think that the target person is a generally well organized person?

Yes No Can' t say

4. Was the essay typed or handwritten?

Typed Handwritten

5. What academic year do you think the person is in?

First ,Second Third Fourth

6. How likely do you think it is that the target person is interested in classical music?

1 2 3 4 5 6 7 8 9

Not at all Very likely
likely

NOTE: AFTER YOU HAVE RECORDED YOUR RESPONSES, PLEASE
PUT ALL THE MATERIALS INTO THE ENVELOPE BUT DO NOT
SEAL IT! THEN RAISE YOUR HAND! YOUR EXPERIMENTER
HAS SOME OTHER MATERIALS FOR YOU.

APPENDIX N.1

SUPPLEMENTAL QUESTIONNAIRE

NOTE: WHEN YOU HAVE COMPLETED THIS QUESTIONNAIRE PLEASE
PLACE IT IN THE ENVELOPE ALONG WITH THE REST OF
THE MATERIALS. THEN SEAL THE ENVELOPE. THIS WILL
HELP TO ENSURE THAT YOUR RESPONSES REMAIN
CONFIDENTIAL.

APPENDIX N.2

1. How persuasive would you say this essay is?

	1	2	3	4	5	6	7	8	9
	Not very per-						Very		
persuasive									
	suasive at all								

2. Was the author free to choose the position advocated in his/her essay? (i.e., whether the essay would be pro or con)

Yes	No
-----	----

DO NOT TURN TO NEXT PAGE UNTIL YOU HAVE
RESPONDED TO THE QUESTIONS ON THIS PAGE!!

APPENDIX N.3

3. Please recall that in the major questionnaire you were asked to judge the essay writer's true belief regarding the issue of western separatism. We are interested in knowing WHY you answered this question the way you did. More specifically, we want to know, as precisely as possible, all the steps you went through in your mind to reach your response. If your judgment was the result of an involved analysis in which you weighed several factors in a 'conversation in your head', please report as thoroughly as possible what that conversation consisted of. Please include any thoughts you had that may help us understand exactly why you made your response. You may use the back of this page if you need more room. Please try to complete this task within 5 or 6 minutes. Thank you for your co-operation.

APPENDIX O

ADDITIONAL INSTRUCTIONS TO PARTICIPANTS

AT THIS TIME WE WOULD LIKE YOU TO TURN TO THE MAJOR EXPERIMENTAL QUESTIONNAIRE. HOWEVER, WE DO NOT WANT YOU TO RESPOND TO THE QUESTIONNAIRE ITEMS IMMEDIATELY!! RATHER, WE WOULD LIKE YOU TO READ THROUGH ALL THE ITEMS AND THEN BEGIN TO DISCUSS YOUR FEELINGS ABOUT THESE QUESTIONS WITH THE OTHER 4 PARTICIPANTS IN THIS SESSION. WE HAVE ENSURED THAT THESE OTHER PARTICIPANTS HAVE RECEIVED THE SAME INFORMATION AND QUESTIONNAIRE THAT YOU HAVE RECEIVED. PLEASE NOTE THAT THE QUESTIONS YOU WILL DISCUSS WERE RANDOMLY SELECTED FROM A LARGER POOL OF ITEMS. WE WOULD LIKE THE DISCUSSION TO TAKE 10 FULL MINUTES. YOUR EXPERIMENTER WILL TELL YOU WHEN TO BEGIN AND WHEN TO TERMINATE YOUR DISCUSSION. PLEASE BEGIN YOUR DISCUSSION WITH ITEM #1 AND WORK DOWN THE PAGE IN ITEM SEQUENCE. PLEASE DO NOT ACTUALLY RECORD YOUR REPOSSES TO ANY OF THE QUESTIONS UNTIL THE DISCUSSION HAS BEEN COMPLETED.

Appendix P

Summary of Analysis of Variance on Attitude Attributions (Experiment 2)

<u>Source</u>	<u>df</u>	<u>MS</u>	<u>F</u>
A (Judgmental Context)	3	4.393	1.331
B (Choice)	1	2.164	0.655
AB	3	1.671	0.506
C (Essay Direction)	1	802.574	243.091**
AC	3	8.036	2.434
BC	1	85.015	25.750**
ABC	3	7.816	2.367
Error	208	3.302	

* p < .05

** p < .001

Appendix Q.1

Summary of Analysis of Variance on Attitude Attributions For Representative and Other Attributors in Group Discussion Conditions

<u>Source</u>	<u>df</u>	<u>MS</u>	<u>F</u>
A (Attributor)	1	0.072	0.018
B (Choice)	1	4.758	1.185
AB	1	0.001	0.000
C (Essay Direction)	1	279.001	69.457*
AC	1	2.901	0.722
BC	1	107.508	26.764*
ABC	1	3.322	0.827
Error	272	4.017	

* p < .001

Appendix Q.2

Mean Attributions of Attitudes Toward Western Separatism by Attributors in Group Discussion Conditions

		Representative Attributors	Other Attributors
No-Choice	Pro Essay	4.9	5.0
	Con Essay	4.0	4.0
Choice	Pro Essay	7.1	6.6
	Con Essay	2.5	3.0

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